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ABSTRACT

The report presents the proceedings of a 1986 World Health Organization meeting on multiprofessional training programmes (emphasizing an interdisciplinary team approach) for health personnel in Europe. Presented first is an overview of the topic which covers: (1) purposes and definition of multiprofessional education; (2) current trends and achievements in the field of multiprofessional education and team training of health students, including the advantages of, ways and means of implementing such training programmes, and constraints and difficulties in implementation; and (3) needs and approaches for the promotion of multiprofessional education. The major portion of the document consists of 11 annexes including case studies analysing multiprofessional education and training programmes for the health professions. These cover the following European countries: Belgium, Finland, France (Paris), Greece, Portugal, Sweden, United Kingdom, the Soviet Union, and Yugoslavia. Also included is a list of conference participants and contributors. (LPT)

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MULTIPROFESSIONAL EDUCATION OF HEALTH PERSONNEL IN THE EUROPEAN REGION

Proceedings of a WHO meeting on Study for Analysing Multiprofessional Training Programmes and Defining Strategies for Team Training

Copenhagen, Denmark
5 - 7 March 1986

Compiled by

J.-F. d'Ivernois and V. Vodoratski

HE 024 301

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TARGET 36

Planning, education and use of health personnel for health for all

Before 1990, in all Member States, the planning, training and use of health personnel should be in accordance with health for all policies, with emphasis on the primary health care approach.

Index:

PATIENT CARE TEAM
HEALTH MANPOWER %ED%
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FINLAND
FRANCE
GREECE
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SWEDEN
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CONTENTS

Page

1. Introduction 1

2. Multiprofessional education: an operational definition . . . 2

    2.1 Purposes of multiprofessional education

3. Current trends and achievements in the field of multiprofessional education in the European region 3

    3.1 Target groups
    3.2 Qualifications
    3.3 Needs
    3.4 Goals and objectives
    3.5 Resources (teachers and material)
    3.6 Content
    3.7 Methods
    3.8 Evaluation

4. Strategies for multiprofessional education and team training of health students/workers 9

    4.1 Advantages of multiprofessional education
    4.2 Constraints and difficulties in implementation
    4.3 Ways and means of implementing multiprofessional education

5. Needs and approaches for the promotion of multiprofessional education 11

6. Conclusion 12

7. Recommendations 13

Annex 1 List of participants 14

Annex 2 Multiprofessional training in health education: The project of the Interuniversity Group for the french-speaking area of Belgium 16

Annex 3 Multiprofessional training for primary health care administration: the Finnish experience 34

Annex 4 Experiences of multiprofessional education at the Medical Faculty of University Paris-Nord, Bobigny . . . 51

Annex 5 Multiprofessional training programmes and strategies for team training in Greece 56

Page

Annex 6 Team training for health personnel in Portugal: an institutional point of view 59

Annex 7 Multiprofessional team training within the health care sector in Sweden 63

Annex 8 The British Life Assurance Trust Centre for health and medical education (BLAT) and multiprofessional training 69

Annex 9 Multiprofessional education for the health professions in the United Kingdom 71

Annex 10 Combination of mono-and multidisciplinary courses in dynamic postgraduate training system of physicians in the USSR 113

Annex 11 Teamwork and multiprofessional training programmes in health sector in Yugoslavia 118

1. Introduction

The increasing number and growing diversity of professions often working together in differently composed teams are required to promote and maintain health. It will therefore be necessary to develop teamwork by different types of health personnel, especially in preventive and in primary health care as one of the important instruments for the achievement of the goal "Health for All by the Year 2000". Health personnel should recognize the value of working together to define and solve health problems through a common frame of reference, and individual members of health teams must be aware of the role of the other members of the team. Multiprofessional education will train members of the health team to tackle particular tasks in a coordinated way. This will be easier to achieve if the team approach to health care is emphasized repeatedly during the various phases of education of each of the health professions starting as far back as possible in the educational system.

Consequently, from 1984 onwards, the European programme for health manpower development has given priority to the promotion of multiprofessional training programmes for health students/workers with emphasis on the teamwork approach to preventive and primary health care. As a first step in a sequence of activities in this field, the Consultation on multiprofessional and continuing education, held in the Regional Office for Europe, from 31 October to 2 November 1984, defined that a major activity in the area of multiprofessional education should be the collection, analysis and dissemination of information on existing and planned programmes, as well as the definition of a strategy for team training·in basic and postbasic education. As a follow-up of the Consultation a "Study for analysing multiprofessional training programmes and defining strategies for team training" was proposed.

Some of the participants of the Consultation, as well as a few additional focal points in several European countries, were approached to make an analysis of multiprofessional training programmes in their countries/institutions. The meeting on the above-mentioned study, attended by the focal points, was held in the Regional Office from 5 to 7 March 1986, to discuss the outcome of the study and to plan follow-up collaborative activities in the field of multiprofessional education in the European Region. The meeting was attended by 12 temporary advisers and 5 staff members from the World Health Organization (Annex 1).

The temporary advisers were from institutions which have had experiences in multiprofessional education at different levels of undergraduate, postgraduate and continuing education.

1.1 Purpose

The purpose of the meeting was:

1. To analyse the present situation and trends in the field of multiprofessional education in the European Region;

2. To outline the strategies for multiprofessional education and team training of health students/workers;

3. To identify collaborative follow-up activities in multiprofessional education in the European Region.

The meeting was opened by Dr A. Wojtczak, Director, National Health Policies and Systems. His speech emphasized the importance of multiprofessional education as a means to develop the teamwork approach to preventive and primary health care in the perspective of Health for All by the year 2000 in the European Region.

Professor N. Areskog was elected Chairman and
Professor J.- F. d'Ivernois, Rapporteur.

During the plenary session, a background paper and case studies on multiprofessional education were presented and discussed.

Then, the participants formed subgroups, each of which devoted a whole day to discussion based upon three topics:

- Situation analysis and trends in MPE* in the European Region;
- Strategies for team training of health students/workers;
- Collaborative follow-up activities in MPE in the European Region.

The third day was devoted to the discussion of the reports of the subgroups and to their recommandations.

The creation of a Network on MPE, of which the participants to this meeting would be the founding members, was decided as a major collaborative follow-up activity.

In the following parts of this report, the content of the background paper and of the case studies are presented, and the proposals that emerged from the working groups are considered.

2. Multiprofessional education: an operational definition

Multiprofessional education consists of training students in health sciences and/or health professionals with different educational backgrounds to collaborate in providing promotive, preventive, curative and rehabilitative services, in conducting research and in planning and evaluating health activities.

The concept of multiprofessional education must be distinguished from multidisciplinary training, which consists in exposing the same group of students to the teaching of different disciplines.

Similarly, multiprofessional education does not mean the training in common of different medical specialists.

Multiprofessional education gathers together students or professionals of different health professions (medical doctors, nurses, psychologists, social workers, dieteticians, etc.) whose action is complementary in the teamwork. In fact, the learning in common of the complementary work within the health team constitutes the main philosophy of multiprofessional education.

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* MPE: multiprofessional education

2.1 Purposes of multiprofessional education

The reorientation of health systems and, in particular, the development of primary health care, makes it necessary to modify the attitudes of health professionals, giving more importance to the health team and the complementary nature of its work, while respecting the specific features of each profession.

The main purpose of multiprofessional education is precisely to foster this change in attitude among health professionals and to develop the common spirit of teamwork, by having health science students and/or health professionals participate in joint educational experience.

More specifically, the objectives of multiprofessional education are to:

(1) Identify the roles of the different members of the team, their interrelations and their specific contributions in:

- solving health problems in common,
- delivering health services in common,
- conducting health research in common,
- planning and evaluating health action in common.

(2) Ensure the acquisition of common theoretical knowledge, methodologies, attitudes and skills;

(3) Develop innovation through the pooling of thoughts and experiences;

(4) Obtain promotion, change and orientation of profession;

(5) Support the development of integrated health programmes.

3. Current trends and achievements in the field of multiprofessional education in the European Region

Experiments in multiprofessional education at undergraduate, postgraduate and continuing education levels were reported on by the participants (Annexes 2 - 11).

The case studies constitute a summary of activities and reflexions on multiprofessional education brought by the participants.

One should note:

(1) The international group and development of multiprofessional education. Not less than nine countries have reported experiences in multiprofessional education.

(2) The variety of the experiences. The experiences reported here (France, Greece, Sweden) concern multiprofessional education at the undergraduate level, five at the postgraduate level and five others at the continuing education level.

This is confirmation of a more important development of multiprofessional education at the postgraduate and continuing education levels where it seems to be more easily implemented.

Two approaches in multiprofessional education initiated by universities at undergraduate level were described.

The first one, at the University of Linköping, Sweden, consists of common training courses for different categories of students, i.e. in medicine, nursing, physiotherapy or laboratory techniques. These short courses are integrated into various parts of the curriculum of each profession and concern "interprofessional" topics related to the health of the individual within society.

Another approach, at the University of Paris, Bobigny, France, is characterized by a two-year period of selection and orientation, prior to the start of specific professional studies. This period includes a common core of studies offered to students who wish to become physicians, midwives,biologists, psychologists or health administrators, together with optional courses which they can choose according to their motivation, interest and academic performance. The common core of studies, known as option Sante, provides training in the principles and methods of public health and offers a way of relating the human being to his environment.

In addition to those experiments of integrating multiprofessional education into a university curriculum, a number of other initiatives were reported to be taking place in the European Region, mainly at postgraduate and continuing education levels. These programmes are organized by universities, postgraduate training institutions, nongovernmental organizations, etc., in the form of courses, workshops, seminars and other educational activities.

Among these experiments, the common area of learning/teaching are:

- public health, health system approach, health management, administration and planning;
- psycho-socio-bio-environmental aspects of health;
- teamwork;
- bio-technology;
- communication, behaviour, relation with patients;
- research methodology;
- statistics, epidemiology.

Analyses of multiprofessional education at the three levels of undergraduate, postgraduate and continuing education reveals differences concerning the target (public), the needs, the goals, the objectives, etc. (Fig.1)

3.1 Target groups

At the undergraduate level, it is composed of health science students (medical students, nursing students, etc.).

At the postgraduate level the attendants are mainly health workers, frequently members of health teams. However, multiprofessional education programmes at continuing education level will generally receive individuals and less frequently whole health teams.

3.2 Qualifications

At the undergraduate and postgraduate levels, multiprofessional education may result in degrees and diplomas. This may also be the case at continuing education level if it is organized within the university programmes.

Otherwise, multiprofessional education programmes allow certificates to be obtained.

3.3 Needs

The needs and reasons to develop multiprofessional education may differ from one institution or educational sector to another. It is clear, however, that the development of multiprofessional education at the undergraduate level is directly linked to the promotion of the concept of "health university", as shown in the examples of Bobigny and Linköping Universities. On the other hand, the need for the promotion of the health team is related to the multiprofessional education programmes at postgraduate level, as well as the promotion of health workers at the continuing education level.

3.4 Goals and objectives

Multiprofessional education plays different roles depending on the educational level: at undergraduate level, it promotes the idea of "working together" and is a way of orientation of the students within the health field. At postgraduate level, it gives professionals the possibility to discover opportunities for teamwork and to acquire new skills. This is also the case at continuing education level where multiprofessional education enables professionals to change their orientation.

3.5 Resources (teachers and material)

Multiprofessional education does not imply the mobilization of considerable resources in terms of teachers and material. Most of the time, resources which exist are those shared with the other educational programmes and departments. Obviously, the creation "ab nihilo" of a multiprofessional education programme needs to employ new teachers and to display appropriate resources.

3.6 Content

Analysis of the various experiences indicates that multiprofessional education is more centred on methodology than on content. In this perspective, basic sciences seem to be a relatively common factor. On the other hand, all the concepts and methods issued from a system approach of the health problems offer more opportunities of exchange and mutual enrichment to the students and health professionals.

3.7 Methods

Besides traditional methods, multiprofessional education offers the opportunity to use active, participative methods like seminars, workshops, training periods among the community or within primary health care teams, etc..

3.8 Evaluation

Several years of experience of multiprofessional education at postgraduate and continuing education levels have demonstrated the success of these programmes, in terms of degrees obtained and satisfaction among the students.

Experiences at the undergraduate level are actually too recent to evaluate their benefits and it could be done after a long term period. However, some research seems to indicate the value of the orientation-system and the interest of the students to have a better mutual knowledge. At the postgraduate and continuing education levels, the outcomes are constituted by degrees obtained, satisfaction of the professionals and effectiveness of the reorientation.

FIGURE 1

Outlines of multiprofessional education at the undergrate, postgraduate and continuing education levels

LEVEL	UNDERGRADUATE	POSTGRADUATE	CONTINUING EDUCATION
1. TARGET GROUPS	Students in Health Sciences (Medical, Nursing), All applicants	Health Workers, Health Team	Health Workers, Individuals
2. QUALIFICATIONS	Degrees Diploma (University)	Degrees Diploma (University)	Certificates, Diploma within the University
3. NEEDS	Health University	Primary health care team	Primary health care care team, Reorientation
4. GOALS	Education Orientation	Training to primary health care (PHC)	Primary health care, Reorientation
5. OBJECTIVES OF MPE	Attitudes, Teamwork, Holistic approach of health	Skills, Teamwork,	Problem-solving abilities, Teamwork

FIGURE 1 (Cont.)

LEVEL	UNDERGRADUATE	POSTGRADUATE EDUCATION	CONTINUING
6. RESOURCES			
Teachers	Shared + Separated	Same	Same
Material	Existing + Extra	Same	Same
7. CONTENTS	Overall Health Sciences, Public Health Environmental Health, etc.	Public Health, Pedagogy, Administration Economy, Sociology Psychology, etc.	Same + Interpersonal Skills
8. METHODS	Traditional + Active and participative methods (group work, field work)	Mainly active and participative methods (group work, field work)	Same
9. EVALUATION	Too early Effectiveness of orientation process	Degrees obtained Satisfaction of students	Certificates obtained Satisfaction of students Effectiveness of reorientation

4. Strategies for multiprofessional education and team training of health students/workers

4.1 Advantages of multiprofessional education

At the undergraduate level, multiprofessional education promotes experiences among students of working together and "recognizing" partners, which is the genesis of the "team spirit".

In addition, multiprofessional education gives students a more global conception of health and introduces them to the concept of the necessary complementarity of thought, action and research by the different health professions.

Seen in this perspective, multiprofessional education helps to "decompartmentalize" curricula and forestalls the development of a "corporative mentality", which is a factor in resistance to interprofessional collaboration.

Such a process also allows students, through common knowledge, interests and methodologies, to acquire a framework within which the different branches of professional training may recognize themselves.

Finally, multiprofessional education offers an opportunity to construct a system for selecting and orienting students towards the different health professions.

At the postgraduate level, multiprofessional education gives health professionals the opportunity to exchange experiences, to recognize the complementary of their roles and to discover the possibilities of teamwork.

Multiprofessional education also gives health workers with a short professional training the opportunity to acquire skills in new fields and to reach a more advanced yet common level of theory and research. In this respect, multiprofessional education is a means of promotion.

At the continuing education level, it will encourage staff to update and assess their qualifications in teamwork and will enable professionals to change orientation and/or profession.

In the training of research workers, multiprofessional education will promote multidisciplinary and interfaculty research and development, taking into account the fact that multiprofessional institutions (more than other establishments) have access to information which allows them to "see the whole picture" in research problems.

4.2 Constraints and difficulties in implementation

We have first to consider the various types of resistance to the implementation of multiprofessional education. This resistance may originate from institutions or some of their faculty members, from decision-makers, from professionals themselves or from their representative bodies.

Multiprofessional education is a recent and innovative concept. For this reason, it may shock mentalities which are attached to tradition, social and educational compartmentalization and the maintenance of a strict professional hierarchy.

To implement multiprofessional education, time is needed to make the various partners aware of the issues involved and to enlist their support. When multiprofessional education is being planned, the problems to be tackled include those of the heterogeneity of educational levels, the granting of exemptions based on the recognition of professional experience, and the organization of refresher and retraining activities.

4.3 Ways and means of implementing multiprofessional education

There is neither a specific place nor a specific training period within which multiprofessional education should be implemented.

Multiprofessional education may be introduced in universities or professional schools, at the level of undergraduate training, as well as postgraduate or continuing education.

Multiprofessional education may be aimed at first-year students as well as professionals with extensive work experience.

Multiprofessional education may give rise to curricula sanctioned by diplomas and qualifications, or it may take the form of a "common experience" (lectures, practical training periods) within a system consisting of several clearly differentiated curricula.

There are various examples of experience with multiprofessional education:

- common core studies for different groups of students who will proceed towards different health professions;
- common learning exercises carried out by students on specific health topics and problems;
- postgraduate training, especially in fields for which new skills are needed (health economics, data processing, health sciences education, epidemiology, ecology, assessment of the quality of care, etc.);
- continuing education programmes for qualified professionals working on common projects, with a view to identifiyng and building up a team;
- research programmes involving both professionals undergoing training as well as practising professionals in a common research area.

It should be noted that the concept of multiprofessional education was being applied in practice long before it was defined and officially recognized. Numerous health sciences training establishments thus justifiably have put the principles of multiprofessional education into effect, in one way or another, for many years.

Secondly, it should be pointed out that multiprofessional education has been and is more easily implemented at the postgraduate and continuing education levels. It may therefore be concluded that at these levels, the development of a common training for different health professions does not create major educational problems or challenge institutional policy, the specific nature of each health profession and the definition of its own role within the health system. Nonetheless, these achievements may even be regarded as a way of familiarizing health professionals, teachers and government authorities with a concept which is initially not easy to implement.

Consequently, it is necessary to consider what are the most realistic strategies for promoting multiprofessional education, assessing for each country of the European Region the feasibility of the approaches described in this document.

5. Needs and approaches for the promotion of multiprofessional education

The development of multiprofessional education is to be promoted by setting up the requisite collaborative mechanisms.

This will imply the need, in particular, to provide and to disseminate information on the aims, goals and realisations of multiprofessional education and to create a mechanism which will allow and encourage a free flow of information and an exchange of experiences between individuals and institutions involved in multiprofessional education.

The working group called this a NETWORK.

The creation of such a "European Network for Multiprofessional Education in Health Sciences" supported by WHO, has been decided by the participants of the meeting.

The aims of this Network, constituted by institutions, organizations and individuals is: "to promote the concept of multiprofessional education in health sciences by facilitating the exchange of information, persons and experiences, and by the development of research and evaluation".

More specifically:

The goal of the Network is to assist educational institutions for health sciences, and organizations and persons concerned in the training of health personnal by focusing on multiprofessional education.

The objectives of this Network are:

(a) To establih a mechanism of meeting and exchanging information and experiences;

(b) To develop and evaluate different university or non-university models of multiprofessional education;

(c) To develop curriculum design methods and learning tools appropriate to a multiprofessional educational system;

(d) To communicate arguments, case studies, research results on multiprofessional education to decision makers, professionals, teachers, students;

(e) To establish health research programmes that include basic, applied and operational research that is relevant to health and health care problems in the perspective of multiprofessional education;

(f) To establish relationships with all the health care services and health care delivery systems. This linkage will also promote coordination between health services and health manpower development of health care systems based on team group work.

The activities of the Network will be:

(a) The stimulation of bilateral and multilateral contacts with a view to strengthening cooperation between institutions, organizations and the persons involved;

(b) The organization of a task force in the area of multiprofessional education;

(c) Assistance in establishing multiprofessional educational programmes;

(d) Exchange of staff and students among participating institutions;

(e) Staff development by means of fellowships and workshops;

(f) The setting up of information and documentation centres, and the provision of a Newsletter for the exchange of all relevant information and literature between the participating institutions and individuals;

(g) Publicizing activities in all these fields;

(h) The training of teachers in planning and realizing multiprofessional education.

6. Conclusion

Despite the fact that multiprofessional education has already been partly tried and tested in several countries, the concept needs much further exploration. Educational organizations/institutions should be encouraged to devise and implement specific projects and to document them appropriately. A method should be developed to evaluate various aspects of multiprofessional education.

Owing to the variety of forms that multiprofessional education can take, it can be applied at various levels of the system for training health professionals. Multiprofessional education may be expected to have an impact not only in education but also in research and professional practice.

The main point of multiprofessional education is that students in health sciences and/or health workers should jointly acquire skills that will facilitate collaboration and teamwork.

By helping health personnel to cooperate in solving problems of common concern, and thus making the role of universities and other teaching establishments more relevant, multiprofessional education may be regarded as an important means of attaining the goal of health for all by the year 2000.

Therefore, the promotion of multiprofessional education should be considered one of the priorities in health manpower strategies and policies at regional as well as national and institutional levels in the European Region.

The content and structure of multiprofessional education at the different educational levels and their consequences in relation to health needs should be carefully analysed and adjusted accordingly.

7. Recommendations

(1) The development of multiprofessional education should be promoted by the setting up of the requisite collaborative mechanisms and network of institutions involved in multiprofessional education.

(2) Laws and regulations should be changed to allow for the development of multiprofessional education.

(3) Negotiations should take place within health workers' unions, professional corporations, ministries and universities in order to implement experiments in multiprofessional education.

(4) The design and implementation of multiprofessional education projects should be given support.

(5) Information on the goals and methods of multiprofessional education should be disseminated to all educational institutions.

(6) Means of evaluating the effectiveness of multiprofessional education should be identified and corresponding research into the evaluation of projects, fellowships and meetings should be supported.

(7) The free flow of information and exchange of experiences should be encouraged among individuals involved in multiprofessional education.

(8) Experiments in multiprofessional education should be evaluated.

(9) Arguments, case studies and research results on multiprofessional education should be communicated to decision-makers, professionals, teachers and students.

(10) Teachers should be trained in planning and carrying out multiprofessional education.

Annex 1

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Annex 2

MULTIPROFESSIONAL TRAINING IN HEALTH EDUCATION: THE PROJECT OF THE INTERUNIVERSITY GROUP FOR THE FRENCH-SPEAKING AREA OF BELGIUM

by
Mrs D. Piette

1. The Interuniversity Group for the Promotion of Health Education Training

The Interuniversity Group was set up in January 1984 by the Minister of Health and Education of the French Community of Belgium. Until then, no health education training was organized on a large scale.

The goals and constraints, as defined by the Minister, are:

- To set up a structure of health education training in the Community;
- To organize this training at every level of education, taking into account all potential health educators;
- To describe, analyse and assess the institutional and methodological approaches used by the Group;
- To avoid creating any new structures in curricula and therefore to integrate as much as possible health education within the existing training.

The priorities selected by the Group for the current first three years of each are: (1) the training of specialized health educators, (2) the initial training of primary and secondary school teachers, nurses, social workers and army officers; (3) the in-service training of school health teams and of teachers.

Each university has set up or will set up a Degree in Health Education (Annexes 1 to 5). Only some sort of assessment will be common to the Group. The work done to organize other trainings is prepared - if not implemented by the Group (see Annex 6).

The Interuniversity Group does not define the contents and the methods of health education training outside the universities. Instead, 4-day seminars are arranged in order to motivate and help teachers from e.g. nursing schools, to integrate health education into their teaching and to spread the idea in similar schools.

The problem of multiprofessional training is encountered in two cases. The first is the training of specialized health educators at university level. This training is open to anyone with at least a Master of Arts degree: nurses, journalists, dentists, general practitioners, psychologists, etc.

To a lower extent, the problem of multiprofessional training is observed during seminars for teachers from schools for primary and secondary school teachers. Instead, the teachers may be converned by the teachers of biology, physical exercices, pastoral care in pedagogy.

The main problem of multiprofessional training in the health education field is not due to a difference in the level of academic achievement of the trainees. It is due to health education itself or, in other hands, due to the various possible contents of the health education training.

2. Various health education trends

Studies of activities in the field have shown that there are various health education trends. These can be classified into three groups:

- the prevention-orientated health education. The expected output of the activity is expressed in terms of, e.g. a reduction of specific risk factors or an increase in immunization rates.
- the pedagogy-orientated health education. The objective may be the development of individual skills, like being able to express and share problems or being able to find help and information. One objective of health education for school children is the development of self-reliance in the field of health.
- the community-orientated health education. The outcome expected by the people is an improvement of usual conditions of life by means of collective action(s).

These orientations combine differently an educational approach and health topics (see Annexes 7 and 8).

Studies showed that with or without health education training, various professional groups held different concepts of health education.

Collins (1) shows this difference between general practitioners, health education officers, health visitors and teachers in England. This is confirmed by French (2) who observes also a difference in the relation of topics between general practitioners and health visitors on the one hand and social workers and teachers on the other. Nutbeam (3) shows the differing perceptions of health education by community physicians and health education officers. All these differences are observed, but not proved in Belgium.

Training may modify the health education orientation of the students. Durguerian (4) reveals such a change when assessing the perception of the role of nurses before and after 6 months training in family planning.

3. Multiprofessional training in health education in Belgium (French Community) at university level

The Interuniversity Group faces the following situation:

- universities set up multiprofessional training in health education as soon as they can do it institutionally;
- teachers (from various faculties) and students lack awareness of their differing perception of health education. Hence a communication problem and probably a lack of awareness of each other expertise and complementarity;
- it is, for the time being, impossible to train or select university teachers and it is nearly impossible to set up new curricula and even to use innovative approaches.

For these reasons, it is difficult to train students in selecting health education approaches relevant to the health objectives, to targets groups and to institutional functions. Similarly no one has as yet thought of training them in working as a team.

As a first step to improve the situation, the Interuniversity Group has accepted a research project to assess the relevance of the health education training at the university level. The method designed for this evaluation will be adapted to suit the needs of the evaluation of training at other levels (e.g. schools for nurses). The aim of the evaluation is to assess the impact of the training on the selection by trainees of educational approach and health priorities.

A self-administered questionnaire will be given to students at the beginning and at the end of the training and again 6 to 12 months after the training.

When the results are available, universities will be expected to modify their health education training if necessary. This may mean changing the (main?) health education orientation of their teaching or to adopt a solving-problem approach, or to diversify the teaching by offering more optimal courses to the students.

This study has another (implicit) objective which is to raise the awareness of all people involved in health education teaching in and out of universities about the existence of health education orientations.

REFERENCES

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3. Nutbeam D., Health education in the National Health Service: the differing perceptions of community physicians and health education officers. Health Education Journal, 1984; 43: 115-119.

4. Durguerian S.H., A study of the role and training of family planning nurses. Thesis submitted for a Ph. D. Institute of Education, University of London. October 1982.

5. Bealtic A., Directions for the development of health education in relation to the prevention of coronary heart disease. A discussion paper. Paper prepared by DHSS/HEC Workshop on "Action to prevent coronary heart disease", Canterbury, September 1983.

UNIVERSITE DE LIEGE

LICENCE EN SCIENCES SANITAIRES

SECTION EDUCATION POUR LA SANTE

SANTE (80)

- Anatomie humaine (10)
- Physiologie humaine (25)
- Biochimie humaine (25)
- Nutrition humaine (10)
- (TC) Microbiologie (10)

SOCIOLOGIE (95)

- (TC) Sociologie (30)
- Analyse sociologique (30)
- Anthropologie de la communication (30)
- (TC) Déontologie (5)

PSYCHOLOGIE (50)

- Psychologie sociale (30)
- Psychopathologie sociale (10)
- Psychologie du malade (10)

PATHOLOGIE (HUMAINE) (90)

- ... des maladies internes adultes (25)
- ... des maladies internes enfants (25)
- ... des maladies externes (25)
- (TC) affections de la cavité buccale (15)

EDUCATION SANITAIRE (30)

- (TC) Education sanitaire générale (15)
- Principes et méthodes d'éducation pour la santé (15)
- Education sanitaire en pathologie (5)

EDUCATION (90)

- Pédagogie théorique et expérimentale (30)
- Technologie de l'éducation (30)
- Pédagogie des techniques audio-visuelles (30)

BIOSTATIQUE ET EPIDEMIOLOGIE (65)

- Statistique sanitaire (10)
- Méthodologie épidémiologique (15)
- Epidémiologie des maladies transmissibles (15)
- Epidémiologie des maladies non transmissibles (15)
- Informatique médicale (10)

ENVIRONNEMENT (40)

- Ecologie (15)
- (TC) Toxicité et étude de l'environnement (25)

GESTION (60)

- Economie des soins de santé (20)
- (TC) Organisation des services et politique des soins de santé (35)
- Economie du médicament

(TC) = Tronc Commun à toutes les sections de la licence en Sciences Sanitaires.

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MODULES **Université catholique de Louvain**

UNIVERSITY OF LIEGE

1 PROBLEMATIQUE DE L'EDUCATION POUR LA SANTE

SANTE		SOCIOPSYCHOPEDAGOGIE		ADMINISTRATION	
2	Santé maternelle et infantile Santé de l'écolier et de l'école	8	Pédagogique expérimentale et Histoire de la pédagogie	14	Droit et Ethique de la santé
3	Santé du travail et de l'environnement	9	Méthodologie générale	15	Planification des systèmes et des personnels de santé. Législation sanitaire et Sécurité sociale
4	Santé de l'alimentation de l'activité physique du vieillissement	10	Psychologie du développement et de l'éducation	16	Gestion de projet
5	Santé de la vie affective et sexuelle (y compris les assuétudes)	11	Sociologie des institutions		
6	Santé/maladie Utilisation des services de santé et des médicaments médecines parallèles	12	Moyens de communication		
7	Biostatistique, épidémiologie, démographie	13	Méthodologie spéciale (y compris documentation)		

17 Option

18 Option

INTEGRATION

21 22

19 Recherche opérationnelle

visites et stages

Evaluation de programmes 20

séminaires-exercices encadrant le mémoire

23 24

Appendix 2.

Appendix 3.1

LICENCE EN EDUCATION POUR LA SANTE
Centre universitaire de Charleroi

Enseignements organisés autour de l'axe "santé"

1. Objectifs généraux

A l'issue des enseignements organisés autour de l'axe "santé", l'étudiant sera apte à

- recourir aux informations dont disposent couramment les professions médicales,

- pour identifier et analyser, dans nos régions les besoins d'éducation pour la santé:

  . chez les jeunes
  les adultes
  et les personnes âgées

  . qui se situent de manière optimale,
  subissent des actions pathogènes
  ou sont soumises à des traitements de remédiation

  dans leur système physiologique personnel,
  leur système de relations à soi-même et à autrui,
  leur système de relations à l'environnement naturel
  et artificiel

2. "Cahier des charges" général

Il sera demandé à chaque titulaire de traiter d'un sous-système particulier (physiologique ou relationnel) de manière à atteindre les objectifs généraux décrits ci-dessus.

C'est ainsi qu'après la description du sous-système considéré dans son fonctionnement optimal pendant les périodes de croissance, de maturité et de sénescence, interviendra l'examen des actions pathogènes dues aux allergies, aux infections, aux assuétudes, aux agents physiques et chimiques et à d'autres causes plus spécifiques.

Des éléments d'épidémiologie seront ensuite communiqués avant que ne soient examinées les remédiations médicales, comportementales et sociétales mises en oeuvre pour lutter soit par la prévention soit par la guérison contre les action pathogènes.

L'ensemble des informations rassemblées au cours de ces quatre phases constitue en fait la matière de base sur laquelle s'exercera une réflexion critique des partenaires dans la formation afin de dégager tout ce qui peut amener la personne à être davantage attentive à son propre bien être et à celui de ses proches, avertie des dangers qu'ils courent et apte à adopter des comportments eficaces. Cette réflexion sera menée par le titulaire ainsi que par le responsable éventuel de séminaire.

Appendix 3.2

Enseignements organisés autour de l'axe "éducation" et "recherche"

1. Objectifs généraux

A l'issue des enseignements relatifs à l'axe "éducation" et "recherche", l'étudiant sera apte à

recourir aux informations et méthodes dont disposent couramment les pédagogues, les analystes sociaux et les spécialistes de la communication pour:

- d'une part,
  - . définir les finalités, les buts et les objectifs d'activités éducatives d'intensité variable destinées aux publics les plus divers
  - . choisir, en fonction des contraintes rencontrées, les moyens nécessaires,
  - . programmer et mettre en oeuvre les activités,
  - . évaluer leurs résultats,
  - . apporter les remédiations nécessaires
- d'autre part,
  - . définir les objectifs d'une recherche,
  - . choisir la méthodologie adéquate,
  - . en exposer et en discuter les résultats,
  - . la situer dans son environnement scientifique

Enseignements organisés autour de l'axe "administration"

1. Objectifs généraux

A l'issue des enseignements relatifs à l'axe "administration", l'étudiant sera apte à:

- . recourir aux informations et méthodes dont disposent couramment les cadres supérieurs de la gestion publique ou privée
- . pour concevoir, mettre en oeuvre, évaluer, améliorer des projets et des structures d'éducation pour la santé.

Appendix 4.

MODULES ORGANISES PAR LES FACULTES NOTRE-DAME DE LA PAIX (NAMUR)

Module 1: La relation soignant-soigné en education pour la santé.

Module 2: Education sanitaire et handicap mental.

Module 3: Education sanitare dans des milieux socio-culturels spécifiques.

Module 4: Education sanitiare en milieu institutionnel.

Module 5: Aspects psycho-socialus de l'épidémiologie et éducation pour la santé.

Module 6: Représentation sociales et histoire de la santé et de la maladie.

PROJET DE REFORME (nov. 85)

LICENCE SPECIALE EN SANTE PUBLIQUE

I. Première année

Orientations :

A.1. Programme de base

					Education p. la santé			
STAT 023	Statistiques appliquées aux sciences hospitalières, y compris l'introduction générale	Smets	Th.20h - P.20h					
SPUB 023	Eléments d'épidémiologie	Thilly	Th.15h		X			
STAT 025	Statistiques démographiques et sanitaires	Smets	Th.15h - P.10h					
GEST 003	Principes généraux d'organisation et de gestion	N.	Th.45h		X			
HYGE 027 A-B	Hygiène du milieu	Heuse	Th.30h - P.30h		X			
HYGE 028	Principes généraux de prophylaxie des maladies transmissibles	Content	Th.15h		X			
HYGE 053	Microbiologie de l'environnement : air, sol, eau et denrées alimentaires	Dony	Th.15h - P.15h		X			
RDIO 039	Eléments de radioprotection	Lejeune	Th.15h					
GEST 031	Aspects juridiques de la santé (ex.: aspects juridiques de la gestion hospitalière)	Heuskin	Th.15h		X			
SPUB 001A	Santé publique et médecine sociale - I. Introduction	Thilly	Th.15h		X			
SPUB 005	Education pour la santé	Cotton	Th.25h		X			
SPUB 011	Politiques et organisations internationales de santé	Laurent	Th.15h		X			
SPUB 017	Organisations médico-sociales comparées	Laurent	Th.15h		X			
SPUB 039	Elaboration de normes et critères de santé	N.	Th.15h		X			
		S/Totaux (1e année)			265h			

LICENCE SPECIALE EN SANTE PUBLIQUE

Première année

A.2. Programme optionnel(* Cours imposés selon les orientations)

			Orientations :		Education à la santé		
DEMO 21/001	Démographie (Lic.en Sc.Sociales)	André	30 h				
DEMO 21/001	T.P. de Démographie (Lic.en Sc.Sociales)	André	30 h				
GEOG 034	Démographie régionale et aménagement du territoire	André	45 h				
STAT 039	Eléments de statistiques appliquées aux sciences médicales (Th et P)	Smets	30 h		X		
SPUB 038	Planification, programmation et évaluation des services de santé (Th et P)	Wollast	30 h		X		
HYGE 006C	Questions approfondies d'hygiène : Eléments de protection maternelle et infantile	Vis	10 h				
HYGE 020	* Hygiène et médecine sociale de l'enfant						
020A	Obstétrique sociale	Buekens	10 h				
020B	Pédiatrie sociale	Hennart	10 h				
020C	Santé publique et familiale	Wollast	10 h				
HYGE 059	Médecine tropicale ; parasitologie, y compris l'épidémiologie et les méthodes de lutte	Carlier	20 h				
HYGE 060	Pathologie et dépistage des maladies tropicales d'origine bactérienne ou virale	De Mol	15 h				
HYGE 004	Hygiène de la maternité et gynécologie sociale	Buekens	15 h				
SPUB 001B	Santé Publique et médecine sociale II. Organisation et enquêtes	Thilly	45 h				
HYGE 040	Epidémiologie et prévention des maladies infectieuses et tropicales	Mercenier	15 h				
HYGE 096	Hygiène alimentaire et nutrition	N.	20 h				
		Totaux (1e année)	partiels		60 h		

LICENCE SPECIALE EN SANTE PUBLIQUE

Première année

A.2. Programme optionnel (suite)

			Orientations :		Educatio la santé	
	Introduction aux méthodes de recherche en sciences sociales (à créer)	Javeau (1)	30 h		X	
	Sociologie des moyens de communication sociale	Thoveron	45 h		X	
	Séminaire spécialisé de psychosociologie : Relations psychosociales dans les institutions de santé (2)	Bolle de Bal Moulin	30 h		X	
	Approches méthodologiques en ~~Santé Publique~~ Ed. Sté : Problèmes pratiques (3);(deux séminaires à choisir)		60 h		X	
	1. Les processus d'apprentissage et la didactique (4)	Dechanxhe (CCB) (5)	30 h			
	2. Les médias et la technologie éducationnelle (moyens audiovisuels) (6)	Hendrickx (CCB)	30 h			
	3. Education pour la santé et médias (presses) (7)	N.	30 h			
	4. Education pour la santé et travail de groupe (8)	N.	30 h			
SOCO 001	Sociologie de l'Education (9) OU	Dinello	30 h		X OU	
EDUC 002	Sociologie de l'enseignement (9) OU	Van Haecht	30 h		X OU	
PEDA 009	Histoire de la pédagogie (9)	Uyttebrouck	15 h		X	
		Totaux (1e année)	1)partiels		180 ou 195 h	
			2)globaux		505 ou 520 h	

LICENCE SPECIALE EN SANTE PUBLIQUE

II. Deuxième année

A.1. Programme de base

			Orientations :		Education à la santé	
SPUB 002	Questions approfondies de santé publique					
002A	Aspects épidémiologiques particuliers	Kornitzer	Th.20h		X	
002B	Aspects économiques de la santé	Laurent	Th.20h		X	
002C	Aspects psycho-sociaux en santé publique	Sand	Th.20h		X	
SPUB 004	Gérontologie. La personne agée dans la société	N.	Th.15h		X	
SPUB 041	Gérontologie. La personne agée dans l'institution	N.	Th.15h		X	
SPUB 007	Compléments de médecine sociale	Kornitzer	Th.30h			
SPUB 012	Santé et développement	Laurent	Th.15h			
SPUB 015	Problèmes de santé dans les pays en développement					
015A	Programmes généraux de santé	Mercenier	Th.20h			
015B	Organisations hospitalières	Laurent	Th.20h			
SPUB 020	Recherche opérationnelle et planification de la santé					
020A		Thilly	Th.15h		X	
020B		Mercenier	Th.15h		X	
SPUB 038	Planification, programmation et évaluation des services de santé	Wollast	Th.15h - P.15h		cfr 1^eA	
HYGE 006	Questions approfondies d'hygiène					
006A	Conférences par collaborateurs extérieurs		Th.10h			
006B	Aspects particuliers d'hygiène du milieu	Heuse	Th.10h			
006C	Eléments de protection maternelle et infantile	Vis	Th.10h			
HYGE 096	Hygiène alimentaire et nutrition	N.	Th.20h		X	
PSYC 090	Hygiène mentale	N.	Th.10h		X	
SAPU 900	Mémoire de licence spéciale en Santé Publique				X	
		S/Totaux (2e année)			150 h	

Appendix 5.4

LICENCE SPECIALE EN SANTE PUBLIQUE

Deuxième année

Orientations :

A.2. Programme optionnel (* Cours imposés selon les orientations)

					Éducation la santé
HYGE 039	Santé et développement physique et mental de l'enfant en milieu scolaire	Hennart	12 h		
PEDA 014	Développement de la personnalité de l'enfant et de l'adolescent	Sand	15 h		
HYGE 041	Médecine et hygiène scolaires	N.	30 h		
	Alcoologie et toxicomanies	Pelc	20 h		
ENVI 021	Aspects sociologiques et politiques de l'environnement	Javeau	15 h		X
	Hygiène scolaire	N.	15 h		X
HYGE 020	Hygiène et médecine sociale de l'enfant :				
020A	Obstétrique sociale	Buekens			
020B	Pédiatrie sociale	Hennart	30 h		X
020C	Santé publique et familiale	Wollast			
	Psychologie et ergonomie y compris analyses des postes de travail et des organismes de prévention	Karnas Salengros (F.Sc.Appl.)	30 h		X
	Séminaire de socio-psychologie : titulaire assistante - conduite de réunion ou - pratique d'entretien ou - relation de formation	Bolle de Bal Moulin Hendrickx	30 h		X
	Pratique de l'animation socioculturelle	Dartevelle (ISEPK)	30 h		X
	Groupe de réflexion en éducation pour la santé (10)	N.	30 h		X
	Problèmes théoriques en education pour la santé (11)	N.	30 h		X
		Totaux (2e année) 1)partiels			310 h
		2)globaux			360 h

LICENCE SPECIALE EN SANTE PUBLIQUE

		Education pour la Santé	
1. Récapitulatif			
a) 1ère année : - cours obligatoires		265 h	
- cours optionnels		240 à 255 h	
b) 2ème année : - cours obligatoires		150 h	
- cours optionnels		210 h	
c) Programme à choisir pour compléter le nombre total d'heures d'enseignement : (à répartir sur la 1ère et 2ème année).		-	
		865 h à 880 h	

Appendix 5.6

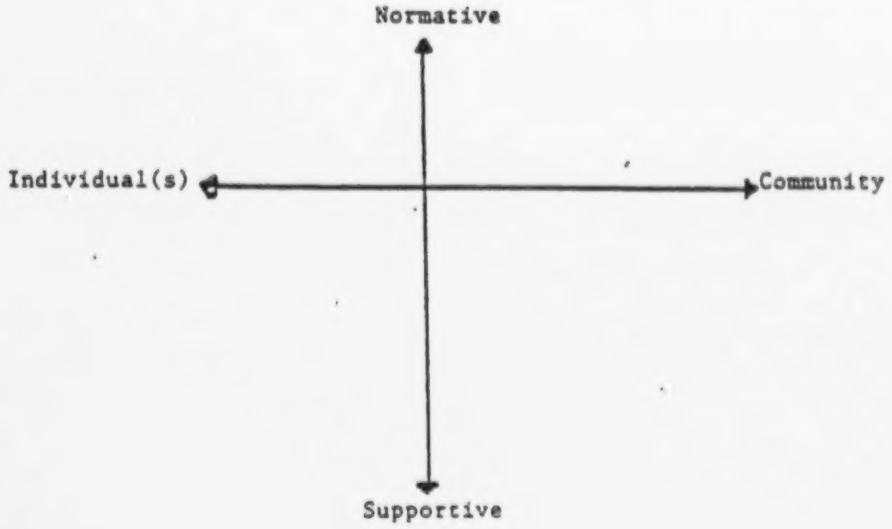
Appendix 6.

University or college Target	Interuniversity Group for the promotion of the training in health education					
	UCL	Namur	Ulg	Mons	ULB	CUNIC
specialized health educators - university level	yes 1984	yes party	yes 1983	/	not yet 1986	yes 1985
in-service training for teachers from schools for primary and secondary school teachers	starts in March 86		starts in January 86		starts in November 85	
in-service training for teachers from nurses schools	Ist contacts made by the Group. Seminars are due to begin during the summer 86.					

Appendix 7.

THE EDUCATIONAL APPROACHES OBSERVED IN HEALTH EDUCATION ACTIVITIES

(BEATTIE 83)


Normative
Individual(s)
Community
Supportive

levels of intervention : individual(s) VS community

methods : normative VS supportive.

Appendix 8.

HEALTH EDUCATION ORIENTATIONS, HEALTH TOPICS AND EDUCATIONAL APPROACHES

TOPICS :	educational approaches :			
	individual normative	individual supportive	community normative	community supportive
1. individual & social skills		× ②		
2. body, health disease, risk factors	▨ ①	×		
3. health services	▨			
4. socio-economical factors related to health		× ②		▨
5. services related to 4				▨ ③
6. health (education) policy				

1. the prevention-orientated health education
2. the pedagogy-orientated health education
3. the community-orientated health education.

Annex 3

MULTIPROFESSIONAL TRAINING FOR PRIMARY HEALTH CARE ADMINISTRATION: THE FINNISH EXPERIENCE

by
M. Isokoski

In 1972 there was a major reorganization of Finnish primary health care when the new Primary Health Care Act came into force. The old system in which the independent professions of physicians, dentists, veterinarians, primary health nurses and midwives were governed by separate laws was now replaced by regulations that assigned responsibility for primary health care to the municipality. To meet these obligations, the municipality must establish a health centre either on its own or jointly with one or more neighbouring communes.

From the outset, there were clear plans that the new health centres should be run by physicians who before the 1972 Act had been acting as municipal officers of health. It was equally clear, however, that there would be a need for administrative training before the new chief physicians could be appointed. To make administrative courses available for these physicians, the National Board of Health requested the universities in the country to submit their proposals as to how such training could be organized most efficiently.

It was decided that the plans outlined by the newly-established Institute for Extension Studies of the University of Tampere would be adopted. Because there was no medical faculty in Tampere in those days, the courses were divided between the Universities of Helsinki and Tampere so that the former assumed responsibility for the medical courses and the latter for the administrative part of training.

It soon became clear, however, that dentists would also need similar training; so now there were two professions in need of administrative studies. In 1972, the Faculty of Medicine was founded in Tampere, and one year later all of the courses within the training programme were arranged in Tampere. At the same time, new professions were invited to participate in the courses: public health nurses, finance managers of health centres and veterinarians. There was also a shift in emphasis in the curricula, with the medical aspects giving way to management aspects.

The basic course in administration of primary health care was originally a six-week course. Now the course is divided into a two-day introductory residential course, followed by a two-week period of intensive instruction at the University of Tampere, and concluded by a two-day follow-up seminar. The objectives and subjects dealt with in the course are described in detail in Appendix 1.

Between 1971 and 1985, 45 basic courses in administration were arranged. The breakdown of participants by professional group was as follows:

Physicians	578
Dentists	264
Public health nurses	212
Finance managers	62
Veterinarians	71
Others	30
Total	1217

As can be seen, the course has been attended by a total of 1217 participants, which gives an average of six participants per health centre. The regional distribution of the participants is shown in Fig. 1.

The curriculum of the course has largely been shaped on the basis of the problems that the participants have reported in their daily administrative work. During the introductory seminar, the participants also have the opportunity to suggest topics that they feel should be dealt with in the course. The participants' evaluation of the course in the follow-up seminar is carefully analysed by the organizer. Thus, it is possible to develop the course so as to better meet the needs of the participants.

The courses are financed by the National Board of Health. Agreements concerning the organization of the courses are drawn up in annual negotiations between the National Board of Health and the University. In these negotiations, evaluations are also made of the courses.

The teachers of the courses are either university teachers or civil servants of local, regional and central government. For university teachers, there are some basic pedagogic requirements, whereas in the case of civil servants it has not been possible to apply equally strict criteria. This has invited some criticism from the participants. However, the situation has always been made clear to the participants from the outset. It has also been emphasized that a primary goal of the course is to establish contacts between, on the one hand, field workers in social care and health care and, on the other, representatives of central government. Although this is not in the records, there is the idea that the civil servants themselves would learn something while giving instruction at these courses.

Civil servants of central and regional government have also been among the participants of the courses. For example, the officials of the National Board of Health have had an excellent opportunity to pass on first-hand information to the financers of the courses.

The reorganization in 1972 of Finnish primary health care caused some irritation and resistance among primary health care workers, particularly among physicians. How was this solved?

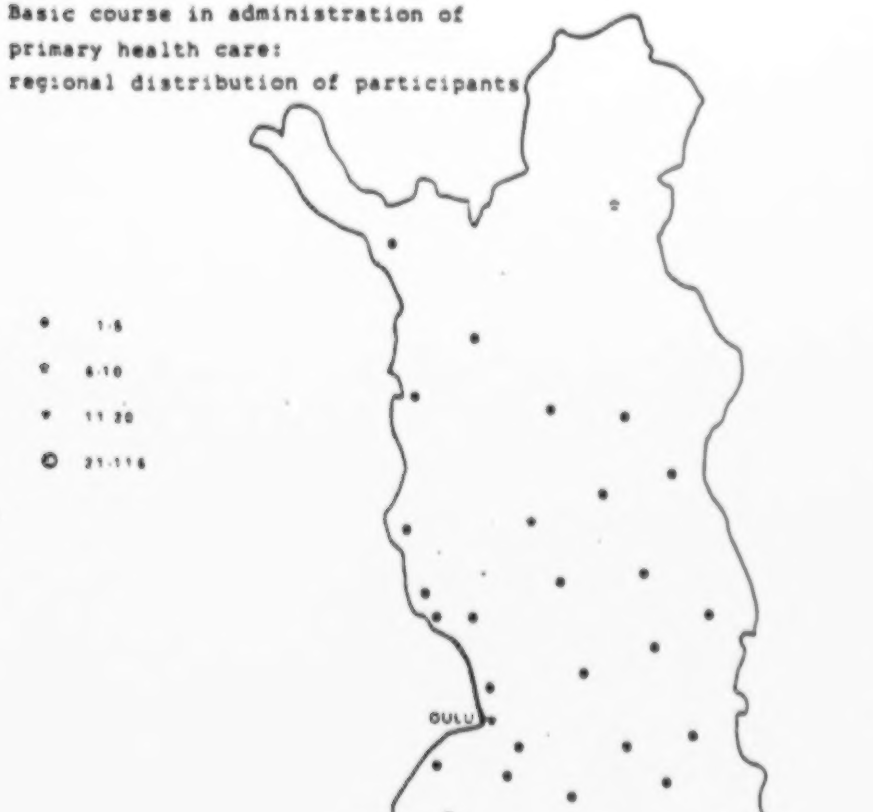

Basic course in administration of
primary health care:
regional distribution of participants
● 1-5
● 6-10
● 11-20
◎ 21-116
OULU
JYVASKYLA
TAMPERE
TURKU
HELSINKI

Fig. 1. Basic courses in administration of primary health care: regional distribution of participants

In 1970, the specialty of general practice was established. It was decided that physicians who had been employed for at least 20 years in the field of primary health care would be granted the specialty of general practice if they took this course. Similarly, practitioners with at least ten years in primary health care and six months training in further education would be granted the specialty.

This was regarded as so great an advantage that even many older physicians applied for admission to administrative training. In addition, the Finnish Medical Association was requested to send a representative to the first course: the report easily convinced the union. In other professions, there was no need for special measures.

After 15 years, the number of applicants to the basic course in administration had declined: in all health centres, at least part of the personnel in leading positions had already taken the course. Therefore, a series of courses was developed to replace the basic course. These included:

- management and leadership;
- administration and planning in primary health care;
- personnel administration;
- administration of social work for health personnel;
- communal administration.

There are also plans to start a course in finance management in primary health care.

The incentive offered by the National Board of Health for physicians and dentists was that by taking these courses, they would gain "administrative competence"; this would require taking all the courses stipulated, as well as at least two years' experience in a post of administrative physician and passing the national examination. For other professions, there are no similar incentives.

There has been growing interest in the new courses among hospital personnel. This may be expected to enhance mutual understanding and cooperation between primary health care and the hospital institution.

There have been preliminary negotiations between the University of Tampere and the Scandinavian School of Public Health on whether these courses could be included in the requirements for the degree of Master of Public Health.

The new courses have not been attended by all the leading and supervisory groups of one health centre, but by representatives of professional groups from different health centres. Conflicts at the workplace have not been part of the training sessions.

There is, however, one health centre of a medium-sized town whose managerial staff has attended a series of courses as a whole, i.e. all managerial levels have been present. It is clear that this requires a completely different approach on the side of the organizer, but for the time being there is very little experience of such arrangements.

Critics argue that the administrative training provided by the Institute for Extension Studies in Tampere is superficial. However, it is also extremely cost-effective. From the outset, it has been oriented to meeting the needs of the reorganization of primary health care in the early 1970s. Now, in every health centre in the country, there is a multiprofessional management. The funds that have been used for training over 1000 managers in all parts of the country would barely have been enough to train a handful of top managers who at the grassroots level would not really have made any difference.

Conclusion

Multiprofessional training in primary health care administration has proved very useful. There has also been a constant demand for such training.

Training was started at the same time as primary health care was reorganized in Finland. This guaranteed sufficient financial resources for carrying out the project.

Training has not been concerned primarily with theory but, on the contrary, with the needs of the participants. Administrative theories have been included in order to provide the participants with some background in their attempts to solve practical problems.

A special incentive for physicians and dentists is an "administrative competence", as is the right to specialize in general practice.

To organize training as it has been in Tampere requires close cooperation between the responsible state authority (in this case, the National Board of Health) and the institute at which the courses are held.

Appendix 1

COURSES IN PRIMARY HEALTH CARE ADMINISTRATION

Organizer	The courses are organized by the Institute for Extension Studies of the University of Tampere and ordered by the Finnish National Board of Health.
Participants	All the courses are intended for physicians, dentists, veterinaries, nurses and finance managers in primary health care administration. Hospital personnel may also be admitted to the courses. All the different professionals study in the same classroom and work in mixed groups.

Qualification for administrative positions

Physicians and dentists can take a state examination in health care administration arranged by the National Board of Health to gain the qualifications required for administrative positions.

In addition, they must have at least two years' experience of administrative work and 200 hours of administrative education. The following courses are accepted as part of this education.

INTRODUCTORY SEMINAR

to the basic course in administration of primary health care

Duration	2 days
Subjects	Opening of the seminar, participants are introduced to each other
	Principles of teamwork * objectives * structure and function of a team * problems of teamwork
	Human basis of cooperation * teamwork and personality * interactive relationships
	Communication * the effects of communication * expressing oneself, negotiating
	Principles of project work * characteristics of a project * objectives of project work
	Personal feedback concerning the participants' behaviour in teamwork
	Introduction to the programme of the course in administration of primary health care
	Closing of the seminar

Basic course in

ADMINISTRATION OF PRIMARY HEALTH CARE

The Basic Course in Administration of Health Care has been organized 45 times during the last 13 years; the total number of participants during this period amounts to 1217.

General goals

The course aims to develop the participants' skills and abilities in implementation, planning and administration of primary health care and in cooperation with different authorities.

After the course the participants

1 are familiar with the connections between primary health care and general social policy
2 are familiar with the Finnish health care system
3 are familiar with the principles of regional administration and planning in primary health care
4 are familiar with the essential problems and trends in primary health care
5 undertsand the importance of people's environment in health care
6 are familiar with the administrative concepts of health care
7 are able to accept and to make use of the feedback by the clients of the health care system
8 have acquired basic teamwork skills

Duration

14 days

Subjects

Opening of the course

Health care and social policy

The role of central administration in health care

The organization of Country Government and its tasks in primary health care

Act on planning and state subsidies in the field of social and health care

Communal administration

Epidemiology

Economics of health care

Theory of management
* management of an organization
* management of human resources

Mental labour protection

The role of health centres in labour protection and occupational health care

Cooperation between health centre and central hospital

Cooperation between health centre and regional hospital

Cooperation between health centre and mental health districts

Contacts between health centre and local commune

Economic administration of a health centre

Tasks of the department for environmental health and hygiene

.Health education

Child and school health services

Maternal health services

Health services for the elderly

Dental health services

Care for drug and alcohol abusers

Rehabilitation; cooperation between health centre and other rehabilitation organizations

Health care under exceptional circumstances

Bills of protest and problems of confidentiality in health care

Trends in public health care in the 80's

Evaluation and closing of the course

FOLLOW-UP SEMINAR

of the basic course in administration of primary health care

Duration	2 days
Subjects	The programme is separately drawn up according to the wishes and needs of the participants. The organizer hopes to receive comments from the participants concerning the usefulness of the course and to use this feedback in planning new courses.

Course in

MANAGEMENT AND LEADERSHIP

General goal	The course aims to develop the participants' managerial and leadership abilities.

After the course the participants

1 are familiar with different leadership styles and are able to analyze and develop their own person style of management
2 understand the importance of a holistic view and of management by objectives
3 understand the importance of cooperation in the management of an organization
4 are able to negotiate with different interest groups
5 are capable of creative problem-solving

Duration 10 days

Subjects

Opening of the course

The task of a manager - a good manager

Different management systems and components of the system
* objectives
* decision-making
* planning
* control

Management by objectives (MBO)
* background and idea
* nature of MBO
* how to proceed to MBO
* setting personal objectives

Formulation and development of strategies

Teamwork and the manager

Different forms of cooperation
* negotiations, committees, teams
* communication

Small group dynamics
* transaction analysis
* interactive relationships

Leading a group
* group behaviour
* different roles in groups

Projects
* leading a project
* setting up a project organization

Health care as a system of activities

Structure and contents of an information system from the manager's point of view

Possibilities offered by ADP, factors restricting the use of ADP

A comment on goal-setting in the planning of federations of communes for primary health care

Group work

The nature of leadership

Leadership styles and effective leadership

Motivation skills

Development of management systems; learning by application of structure analysis

Planning and development of one's own work

Some views to oral communication and negotiation skills

Phases of negotiation

Negotiation demonstrations

Evaluations of negotiations
* methods and possibilities
* negotiation roles
* process and results

Problem-solving and decision-making in negotiations

Conflicts and arbitration in negotiations

Oral communication and decion-making in meetings and conferences

Evaluation and closing of the course

Course in

ADMINISTRATION AND PLANNING OF PRIMARY HEALTH CARE

General goal: The course aims to develop the participants' planning and administration abilities in the field of primary health care

After the course the participants

1 are familiar with health care legislation in force and under preparation
2 are familiar with the planning system of health care
3 are familiar with the relations between health planning and social planning
4 are familiar with the relations between health planning and local, regional and national planning of different sectors
5 are familiar with the principles of short, medium and long-term planning
6 are familiar with the administrative system of health care and its connections with local, regional and central administration
7 are able to transform plans into pratical administrative work
8 are able to supervise the implementation of the plans
9 are capable of cooperation with different professional groups in planning and administration
10 are capable of cooperation with different sector of society in planning and administration
11 appreciate the views of political appointees and are capable of cooperation with them in planning and administration

Duration: 10 days

Subjects: Opening of the course

Structure and problems of public planning

Structure and procedures of Finnish public administration

Population prognosis

The goals of health care

Health status of the population

Health policy

Priority problems in health care

Planning tasks of health care

The effects of regional planning on health care

The economic connections of health care with other sectors of society

Cooperation between health care and social work

Health centre as an organizer of domiciliary care for the aged and chronically ill

Soft parameters in communal planning

Building and rebuilding as processes

Cooperation within an integrated hospital district (mental, tuberculosis and general hospitals)

Quality assurance in primary health care

The administrative position of health care personnel

Course in

PERSONNEL ADMINISTRATION

General goal	The course aims to develop abilities needed in personnel administration of primary health care

After the course the participants

1 are familiar with cooperation systems of personnel administration and the relevant stipulations and agreements
2 are able to use the means of personnel administration (personnel planning, instruction for newcomers, teamwork and supervision) in implementing the goals of primary health care
3 are able to fit together the personal objectives of the employees and those of the organization in primary health care

Duration	5 days
Subjects	Opening of the course
	Personnel planning as part of health care planning
	Personnel administration - its goals and functions
	Adjustment of the amount and structure of personnel
	Communication in organizations
	Recruitment (emphasis on job interviews)
	Personnel development
	Organizational democracy
	System of salary negotiations and questions of current interest
	Japanese management, quality cvircles
	Psychology of work and mental labour protection
	Evaluation and closing of the course

Course in

ADMINISTRATION OF SOCIAL WORK for health care personnel

General goal	The course aims to familiarize the participants with the administration of social work and to improve their ability to cooperate with social work.

After the course the participants

1 are familiar with the main characteristics of the administration of social work
2 are familiar with the differences in the decision-making process of health and social care administration
3 are able to cooperate with social work

Duration	5 days
Subjects	Legislation of social work and health care Organization of the administration of social work, development of social security Personnel and education in the administration of social work Health care and social work as parts of local administration Social security and the resident of the local commune Practical work and its problems (emphasis on child and alcoholic welfare) Instructions and goals laid down by the National Board of Social Welfare regarding the welfare of the aged Excursion to a pensioners' service centre Excursion to a home for the aged Information activities of the communal social work organization Cooperation between health care and social work Soft parameters in the planning of a local commune Evaluation and closing of the course

Course in

COMMUNAL ADMINISTRATION

General goal	The course aims to familiarize the participants with local administration and community participation.

After the course the participants

1. are familiar with the decision-making system of communcal administration
2. are familiar with the relations between local communes and the state
3. are familiar with the position of the communal personnel
4. are familiar with the financing of local communes
5. are able to refer matters for decision in a a communnal board
6. are able to cooperate with trustees of a community

Duration	5 days
Subjects	Opening of the course Structure and function of the decision-making system in local policy Decision-making and administrative procedures in local administration Complaints against the legality of decisions Relations between local communes and the state Characteristics of federations of communes Communal development plans Financing system of local communes Economic planning in local communes Control of economy Documents of local authorities Community planning Position of the communal personnel Evaluation and closing of the course

Annex 4.

EXPERIENCES OF MULTIPROFESSIONAL EDUCATION AT THE MEDICAL FACULTY OF UNIVERSITY PARIS-NORD, BOBIGNY

by

by J.-F. d'Ivernois, P. Cornillot and Y. Zomer

1. Introduction

The experience of Multiprofessional Education (MPE) at the Medical Faculty of University Paris-Nord, Bobigny, is fundamentally based on the concept of a Regional Health University which has been initially discussed in an OECD conference held in Paris in 1975. Since this time, the different universities participating in the conference (Maastricht, McMaster, Beersheva, Kuopio, Linköping, Bobigny) have developed such or such aspect of the general concept. Bobigny and Linköping are the Universities which have undoubtedly invested most in the field of MPE at the three levels of undergraduate, postgraduate and continuing education.

2. Multiprofessional education at the undergraduate level

The first model of MPE in Bobigny was created in 1977. This system was constituted by a common core of "Health Sciences" in fact: Anatomy, Physiology, Histology, Biochemistry...

This common core is a one-year programme which is concluded by a selection examination which allows entry to medical studies. At the same time the students attend the programme of one of four specific options: nursing, biology, health administration, clinical psychology. One of the advantages of this system is to offer to students who have failed twice at the selection examination an experience and a universitary degree in another health field.

The new curriculum which began in 1984 is far more complex. It represents an original model unique in France of training, selection and orientation to different health professions. The principle of this two year curriculum may be summarized in one sentence: "everybody who is interested in health sciences may find his proper way".

How it is working? The design of this curriculum is a "modular" one:

The students who register in Bobigny in September may be:

- Young students coming from the secondary school, or
- Professionals coming from the health or social sector.

They have first to choose one of the DEUG (which is the first degree in the French University, corresponding to the Anglo-Saxon "baccalaureate") offered by Bobigny:

- DEUG in nursing
- DEUG in biology

or other DEUG offered by the University Paris Nord in collaboration with Bobigny:

- Law
- Health and Social Administration
- Psychology
- Economic Sciences.

All the students start with a common module of orientation of 45 hours which is a fundamental presentation in Psychology, Sociology, Economy, Experimental Sciences. This course is followed by a diagnostic test which controls the level of the students.

Then, the students attend another common course called "Option Santé" of 300 hours, distributed over two years. This programme concerns health in the different perspectives of epidemiology, community health, psycho-sociology, economy, biology, ecology, decision-methodology and health education.

The originality of this module is to give the students a global and analytic view of the health problems. Usually, such concepts and matters are taught during the last part of the health curricula, but this is taught at the very beginning because the concepts of community health constitute the real common core of the health sciences, and are much more relevant than basic sciences (Anatomy, Biochemistery, etc..).

At the same time, students attend the programme of the specific option (DEUG) they have chosen.

After the first trimester of common and specific learning, the students are individually interviewed by the teachers. Depending on the score they have obtained in the different sub-tests and also on their motivation and interest, they must decide if they change their orientation or not and what type of selection examination they want to prepare during the second and third trimester.

The modules offered during the second and third trimester are directly related to the preparation of selection-examinations for the entry in:

- Medical studies
- Dental surgery studies
- Paramedical studies (seven health profession, including nursing)
- Midwifery studies
- Studies in healt management.

Students who fail this examination are authorized to repeat a second year in which they may obtain a degree (DEUG) or change again their orientation.

In conclusion, this system offers to every student the opportunity to find his proper way in the health sciences with an excellent educational efficiency for the institution.

The other advantages are:

- to give students a more global conception of health and introduce them to the concept of the necessary complementarity of thought, action and research by the different health professions;

- to allow them, through common knowledge, interests and methodologies to acquire a framework within which the different branches of the professional training may recognize themselves.

3. Multiprofessional education at undergraduate, graduate and continuing education levels

There are other MPE programmes in Bobigny which are offered at the undergraduate and continuing education levels.

3.1 A Master's degree in Health Administration which aims at training administrators, directors of hospitals, clinics and other health institutions. This programme is open to both health professionals and students;

3.2 A Master's degree in Public Health open to the health professions and to social workers;

3.3 A Master's degree in Health Sciences Education open to all categories of Health Sciences Teachers;

3.4 In the next future, a Master's degree in Care will be available.

Three other multiprofessional education programmes are very popular:

- The Universitary certificate, called "Health and Sport", which is a two-year programme open to physicians, nurses, physiotherapists and sport coaches;

- The Universitary certificate called "Practice in Mental Health" open to psychologists, nurses in psychiatry, physicians, which is a three-year programme;

- A one year programme in Alcohology open to all persons concerned by the fight against alcoholism;

- A three-year programme in Natural Medicine open to physicians, chemists, dental surgeons, physiotherapists, veterinarians.

4. Advantages of multiprofessional education

What are the advantages of such a MPE policy?

At the undergraduate level. MPE provides the opportunity for students to work together and to recognize partners, which is the genesis of the "team spirit".

Seen in this perspective, MPE helps to "decompartmentalize" curricula and forestals the development of a "corporative mentality" which is a factor in resistance to interprofessional collaboration. Finally, MPE offers an opportunity to construct a system for selecting and orienting students towards the different health professions.

At the postgraduate level, MPE gives health professionals the opportunity to exchange experiences, to recognize the complementarity of their roles and to discover the possibilities of teamwork.

MPE also gives to health workers with a short professional training the opportunity to acquire skills in new fields and to reach a more advanced common level of theory and research. In this respect, MPE is a means of promotion. At the continuing education level, it enables professionals to change orientation and/or profession.

5. New perspectives in educational research and curricular innovation

In our experience, MPE opens new perpectives in educational research and curricular innovation:

5.1 We have first to consider research based on what is common and what is specific to each health profession.

At the present time, we can assure that the common area of teaching and learning among different health professions is centred more on methodology rather than on contents. In this perspective, basic sciences appear to be a relatively poor common factor.

On the contrary:

- research methodology
- problem solving methodology
- communication, behaviour, relation to patients
- community health approach
- informatic, pedagogy
- epidemiology
- assesment of quality of care
- bio-technology, etc..

seem to offer more opportunities of exchange and mutual enrichment.

5.2 MPE gives also the opportunity to decompartmentalize the curricula, to substitute rigid, department/discipline organization for a more flexible interdepartmental, interdisciplinary, and integrated approach.

MPE needs an educational organization by modules (modular curriculum design): the aims of each module must be very clearly specified to the students. In this perspective, MPE stresses the usefulness of the definition of clear, relevant educational objectives.

5.3 Other ways in educational research opened by MPE are:

- The problem of the proper orientation of the students. Too much attention has been given to the problem of the selection of the future health professionals and too little to the problem of orientation. The applicants to the various health sciences studies represent an interesting population: intelligent and motivated: the MPE system helps the students to orient themselves.

The problem of heterogeneity of educational levels is particularly important in the case of MPE postgraduate or continuing education programmes. How to make the levels similar and what are the retraining activities needed for that purpose?

- Another fascinating research problem is the granting of exemptions based on the recognition of professional experience. This is one of the keys to the success of the MPE programmes. The traditional attitude of the universities vis-a-vis the recognition of the professional experience has to be changed if we want to develop effective MPE continuing education at the university level. But how to evaluate a professional experience? What are the criteria which have to be used in order to translate it in academic values?

Finally, the experience gained since the development of MPE ten years' ago has lead to research on the "problem solving process". The problem solving process per se has to be taught and learned as a tool to better understand the specific approach of such and such discipline or activity, to solve common health problems, and to carry out research in health.

6. Conclusion

MPE experiences has represented for Bobigny an opportunity to develop curricular innovation, educational research, and to contribute to the promotion of teamwork and the development of health professions.

Annex 5

MULTIPROFESSIONAL TRAINING PROGRAMMES AND STRATEGIES FOR TEAM TRAINING IN GREECE

by
V. Lanara

This paper refers to the present situation and trends in multiprofessional education in the Division of Nursing, University of Athens, and in continuing education. Questions are raised to provoke discussion among the participants in the meeting for further clarification and for defining strategies for team training.

1. Present situation and trends in the Division of Nursing, University of Athens

The Division of Nursing was founded in 1979 (Presidential Decree 184/1979) as a department of the School of Medicine. With a new law on reorganization of university education (Law 1268/1982), four divisions now constitute the School of Health Sciences:

- Division of Medicine (six years);
- Division of Dentistry (five years);
- Division of Pharmacy (four years);
- Division of Nursing (four years).

Each division is independent in terms of administration. They have their own president, faculty, secretariat, budget, etc. However, the divisions cooperate and share facilities as well as faculty according to common needs, and they are almost all on the same campus.

At present, the Division of Nursing accepts only registered nurses (graduates from three-year and four-year higher nursing programmes after high school), who enter in the second year after competitive qualifying examinations. They study for three more years and graduate with a university degree in nursing. To date, 70 graduates have received a nursing degree from the University of Athens.

The general purpose of the programme is to prepare nurses for leadership positions in teaching and administration with sound clinical and public health knowledge, including research.

2. Faculty

There are at present 11 permanent faculty members in the Division of Nursing, all of whom have either a Ph.D or Ed.D. It is a multidisciplinary faculty from the fields of nursing, medicine, public health, biology, pharmacology, psychiatry and administration. There are also visiting professors from the fields of sociology, psychology, health economics and computer information. Graduate nursing students working on their doctoral dissertations assist in clinical teaching on a part-time basis.

3. Programme

Some courses are taken by nursing students with medicine and dentistry students, e.g. biological sciences, statistics, epidemiology. They also have laboratory exercises in physiology, biology and immunology. In addition, other general subjects such as philosophy, principles of teaching and pedagogy are taken at various schools and departments of the University of Athens, e.g. the School of Philosophy, together with students of relative disciplines.

4. Comments

Can the above-described situation be considered as multiprofessional education? Regardless of the classification, it would be interesting to know whether or not this educational system will promote attitude development and common knowledge and skills among the students of health sciences, and whether this prepares the future health practitioners for better collaboration, to work effectively as a team, thus enhancing the provision of health delivery services to the population.

Can this goal be achieved, since the same approach is not continued in clinical teaching in hospitals and in primary health settings where health care delivery takes place in reality?

Is it enough for the students to be exposed to multiprofessional education only in theoretical courses?

How can multidisciplinary teaching be applied in hospitals and primary health care settings with inadequate numbers of teachers?

Are the teachers relatively well prepared for multiprofessional teaching?

How can team training be promoted?

In the near future, a basic nursing degree programme will start at the Division of Nursing, University of Athens. The undergraduate nursing students will be of the same age and level of education as the medical and other students of health sciences, with no experience in the field.

Perhaps an extensive and a better planned multidisciplinary education could be tried with faculties and students of the four departments of the School of Health Sciences on a small, experimental scale.

Could some kind of mechanism be established to promote collaboration among universities involved in multiprofessional education in the European Region, perhaps through the World Health Organization, countries of the European Economic Community or the Council of Europe?

5. Present situation and trends in continuing education for health personnel in Greece

According to law L397/1983 on National Health Systems in Greece, the Permanent Committee of Education and Further Education for Health Personnel of the Central Council of Health was established.

It is a multiprofessional committee consisting of physicians from various specialties, nurses, dentists and one pharmacist, as well as representatives from university faculties: medicine, dentistry and nursing.

It is an advisory body to the Minister of Health through the Central Council of Health for educational matters of health personnel. More specifically, its main responsibilities include the areas of:

- *specialization of physicians, dentists and nurses;*
- *continuing education for all health personnel.*

Until now, the Committee has been made up mostly of medical, dental and nursing specializations. In relation to continuing education, its work is not yet completed. The Committee is at the point where it studies policy formation and develops methods and strategies to tackle the matter nationally.

This is a multiprofessional approach, and we hope to conclude the engagement successfully.

Annex 6

TEAM TRAINING FOR HEALTH PERSONNEL IN PORTUGAL: AN INSTITUTIONAL POINT OF VIEW

by
A.B. Rendas

According to the literature the word "equipe", the french equivalent of "team" derives from "esquif", an old name meaning a line of boats tied together and pulled by a group of men or horses. Throughout the ages, this meaning of working together to achieve something in common or to win, has always been linked to the idea of a team.

More recently and with the advent of industralization, various techniques of job evaluation have been designed and applied to produce new resource teams able to respond to specific needs.

In the health field, particularly in the developed world, the advent of specialization and sophisticated technology, produced the need for closer links between the health personnel, but it is doubtful whether it developed personal capacities for teamwork in order to solve specific problems of the individual or the community.

This meeting on the study for analysing multiprofessional training programmes and defining strategies for team training was preceded by a Consultation which defined the process "as the training of a group of health students and/or workers with different educational backgrounds, learning together to collaborate in providing promotive, preventive, curative, rehabilitative and other health related services".

It is within this context that I shall analyse the Portuguese situation and present the point of view of the Institute of Hygiene and Tropical Medicine, a postgraduate institution devoted to education, research and training in the health field.

1. The Portuguese health situation (summary 1980-82)

The Portuguese population was around 9.8 million inhabitants (2.6 million in the capital area) with a life expectancy of 67.7 years for males and 75.2 years for females, with an infantile mortality rate of 21.8% and a general mortality rate of 9.6% mainly from cardiocirculatory causes.

In a country still with large differences in population density the coverage in electricity, water supply and sewage disposal was around 94.9%, 63.4% and 46.5% respectively. It is expected that the programmes for regional development in progress will improve these numbers considerably.

The national health budget was 12.5% of the total and 3.9% of the gross national product.

The health services include hospital care provided at 10 central, 43 district and 150 local hospitals with a total of 23 000 beds and with a length of hospitalization varying between 15.1 and 9.4 days. The primary health care is provided at social security units and health centres with an average of 2.5 consultations per inhabitant per year.

The health personnel included nurses where the growth density has been one of the lowest in Europe with a total of 18 823 in 1981, giving a ratio of 491 inhabitants/nurse. On the other hand the number of physicians has increased significantly in the last years with a total of 22 078 and a ratio of 420 inhabitants/physician in 1982. Considerable efforts are now being made to correct this distortion in these two categories of health personnel, particularly at planning level for example by the application of numerus clausus since 1982-83 in admission to the medical schools.

The training of physicians includes a 6-year undergraduate period (after 12 years of general education) followed by the internship (18 months) which is necessary for the registration to the independent medical practice and compulsory for further professional differentiation in three different careers - hospital medicine, general practice and public health.

The postgraduate training occurs in institutions which depend either from the Ministry of Education (such as the Institute of Hygiene and Tropical Medicine) or from the Ministry of Health (such as the State hospitals). Non-official organizations such as the Portuguese Medical Association (Ordem dos médicos) and the scientific and professional societies also play a role in organizing postgraduate training activities.

The training of nurses lasts 3 years after 9 years of general education; after two years of practice the nurses may take a specialization course lasting one year in five different areas: administration and teaching, mental health, public health, pediatrics and rehabilitation.

The main problem is, however, the lack of communication between the planners, the trainers and the providers of health services which does not allow for a proper policy on manpower development.

The situation is not unique to Portugal and if we refer to a recent WHO study, it is possible to define our position as moving from the quantity stage to objectives such as quality, equality and coverage (Fülop T. and Roemer M.I. International Development on Health Manpower Policy, 1982, WHO Of. publication no. 61). If however, we want to reach other objectives such as efficiency, planning, relevance and integration so fundamental to respond to the needs of Health for All through primary health care, it will be necessary to transform the present system of education and training for the health professionals in Portugal.

2. The role of the Institute of Hygiene and Tropical Medicine

The Institute is part of the New University of Lisbon and its functions are to conduct teaching, promote research and develop technical assistance and cooperation in the fields of public health and tropical medicine.

Although dependent on the Ministry of Education, the Institute has an official agreement with the Ministry of Health, through the Department of Health Studies and Planning (DEPS) which allows for joint activities in collaboration with WHO in the lusophone speaking countries in Africa.

Since 1982, the New University of Lisbon has felt the need to improve its training programmes in the health field and has been providing intensive courses on teaching and learning methods in order to develop national manpower capable to respond to the new aspects of health development.

In 1985, the Centre for Educational Studies for Health Development was established at the Institute of Hygiene and Tropical Medicine with the following objectives:

(1) to train teachers and other staff responsible for educational programmes in the health field, particularly in primary health care;

(2) to provide consultation services in health manpower and health services development;

(3) to conduct research into health manpower and services development.

The Centre acts as a catalyst in bringing together to the field of health other national resources already involved in educational activities such as the Institute of Educational Technology and the Portuguese Institute of Distance Learning.

In the workshops on teacher training attended by physicians, biologists and nurses, the objective of developing teamwork capabilities has been dealt particularly in relation to specific problems (for example in the last workshop the participants designed a training programme to fight malaria in Sao Tomé e Principe involving doctors, nurses, laboratory technicians and primary health care workers).

The concept of training the health team has been developed in several settings but I wish to refer to the experience of the University Centre for Health Sciences of Yaoundé, United Republic of Cameroon, in the early seventies as described by Monekosso and Quenum in "Personnel for health care: case studies of educational programmes", Katz F.M. and Fülop T. editors, WHO Geneve, 1978, Public Health Paper no. 70, Chapter 11, pg. 185-207. The emphasis of that programme was not only in sharing courses or lectures but also "on participation by all the students in practical team training exercises in the field" undertaking "integrated health care, curative and preventive medicine, as well as community healh education".

From our experience we feel that team training demands above all a change in attitude towards solving health problems.

For that reason we have planned the following project as prerequisite to develop strategies for team training:

3. *The definition of tasks in designing team configurations:*

The objective of educational programmes in the health field is to qualify and maintain personnel competent to perform tasks that demand knowledge, psychomotor skills, judgement and decision making.

Most of the educational programmes place emphasize on content and fail to define the actual functions of individuals. Role titles such as physician or nurse are no longer sufficient or indicate the specific activities of those who will fill them.

An alternative approach in the use of task designations which identify for each person the tasks for which he or she has gained competence through education, training and experience.

The main objective of the study is:

1. to identify professional health profiles by task analysis;
2. to establish a way of integrating curricula for the health personnel.

As a starting point the participants, mostly teachers or trainers, define the main health problems of their health system using the model developed by the Wallo exercise.

Afterwards the different approaches to solving the health problem are defined and related to the various tasks from self-care, to individual or community care and also those requiring the highest professional level.

The professional functions defined by the teachers are then compared with the answers obtained from panels composed of personnel in practice at the various health levels.

By using such a study we hope to:

1. redesign the personnel profiles;
2. identify the various degrees of training necessary to perform the various tasks;
3. find the most suitable team to tackle specific health problems.

We believe that both at basic or postbasic multiprofessional education, it is essential to define professional tasks and to avoid static and inflexible roles which define rights and obligations instead of the actual functions of individuals in the health team.

Annex 7

MULTIPROFESSIONAL TEAM TRAINING WITHIN THE HEALTH CARE SECTOR IN SWEDEN

by
N.-H. Areskog

1. Introduction

At the Consultation on Continuing Education and Multiprofessional Training held in the WHO Regional Office for Europe, Copenhagen, from 31 October to 2 November 1984, there was unanimous opinion that primary health care, teamwork and multiprofessional education are closely linked together. Since these three factors have priority as tools to achieve the WHO goal of Health for All by the Year 2000, it is necessary to analyse the scanty experiences of multiprofessional training so far and the resistance to change among schools and faculties within the health care sector. Future strategies for multiprofessional education and team training have to be planned.

At the above-mentioned Consultation, it was agreed that teamwork is desirable somewhere in the curricula of undergraduate health education. Also, the learning has to be partly shared in order to realize the intentions about the functions of the team.

There are, unfortunately, only a few controlled studies in the literature concerning trials in multiprofessional education and team training. In my background paper to the meeting mentioned above (ICP/HMD 103/m02/6), I reported some data experiences from Linköping. The aim of the paper was to report some data about the planning and strategies for the new health university with multiprofessional education and training starting in August 1986. Furthermore, a literature search was made on this theme and a short review is given of the few reports listed there.

2. The multiprofessional team

The idea of a multiprofessional team is not new. In the 1950s, the development of science and technology in medicine, combined with an increasing number of subspecialties within the health professions and manpower shortage in some of them, created a need for interdisciplinary teams mainly consisting of nurses and physicians. The widening of the concepts of health and illness also contributed. However, the time was not ready for team care owing to old traditions and structures. In 1978, the Institute of Medicine (IOM) Washington, DC, USA, recommended the team approach for care delivery in medical schools and in 1980 got support from both the American College of Physicians and the American Nurses' Association.

However, there have been and still are conflicting opinions about the goals, structures and leadership for these nurse/physician teams that have retarded development. Furthermore, there are difficulties with different educational backgrounds and levels, often different paradigms within research and development and rigid hierarchical structures.

On the other hand, during the last decade with increasing support to and strengthening of primary health care, where the nurse/physician team by tradition has often been a reality in contrast to the hospital care, the ideas of the team approach have grown stronger and have been widened to multiprofessional teams in primary health care with nurses, physicians, occupational and physical therapists and social workers.

3. Education and training of the multiprofessional team

In order to realize a meaningful interprofessional team training at undergraduate level, it is likely to state that the students should have a common fundamental view, reference frame and knowledge concerning the goals of the health care system and the different occupational roles of the health professions. A common core of basic knowledge, rather within the behavioural and social than the natural sciences, and some defined common clinical and attitudinal skills are required tools. Students apply these in practice, both individually and in interprofessional or multiprofessional teams within the frame of the health university.

The concept of a regional health university is a university of health sciences with different fields within the health sector. It implies close collaboration not only between different fields but also a co-working arrangement with the health care delivery system within a region of a country. This arrangement will promote team training, especially within the primary health care sector. A partnership between a university of health sciences and a regional health service ought to facilitate both interprofessional education at undergraduate and postgraduate levels as well as continuing education, and also promote research into often neglected areas within primary health care.

The new regional health university in Linköping started in August 1986. It implies a fusion of the former medical school and the college for nursing, occupational and physical therapists, laboratory assistants, and social assistants for the handicapped and the elderly fields. It also implies new curricula for all these educations, which take place for the first ten weeks together, and thereafter "streaks" and sessions of common education and training between two or more health educations.

The following scheme will be used as an introduction to multiprofessional training for all the different health professions at the health university.

- Aim. The students will acquire basic knowledge using scientific methods, develop a common reference frame and prepare themselves for teamwork.

- Integration. Between students with different fields, disciplines, theory and practice, teachers from different faculties.

- Objectives. Knowledge: understand connections between health, disease, social and environmental conditions; understand how humanitarian valuations and attitudes and ethical norms influence the relationship receiver/donor within the health and social care systems.

- Skills. Develop communication skills, empathic abilities and readiness to handle conflict situations; develop ability for group work, critical thinking, analysis, creativity and self-learning.

- Attitudes. Increased self-knowledge and understanding of the situation of patients/clients; develop ability for cooperation in group work; develop understanding for the total (physical, psychical, social) care need of patients/clients; develop positive attitudes to independent, scientific and health offensive thinking.

- Content. To be a human being in a philosophical, historical, social and behavioural scientific perspective. Four themes are used: child, adolescent, adult and senescent. The themes are highlighted in a problem-based way with input from humanities (ethics, philosophy, history, science theory), medicine (community and environmental medicine), social and behavioural sciences (cultural, geography, psychology, social psychology, sociology, social anthropology, political science) and science (statistics and epidemiology). The themes are studied mainly in small tutor groups with participants from different fields (6-8 students). There will be field studies for skills' training with 2-16 students, seminars with 25 students and a few introductory lectures with 200 students. In a period of 9.5 weeks, two days a week are devoted to education-specific studies, the other time to multiprofessional theme training.

This study plan has been worked out by a group consisting of a primary care physician, two nurse-teachers and an educationalist.

4. A pilot study with medical and physical therapist students

In the autumn of 1985, a controlled pilot study (1) was performed in the Department of Orthopaedic Surgery, Linköping. The theme was trauma (fracture, luxation) to the upper extremity. Ten medical and 16 undergraduate physical therapy students took part, divided into five mixed groups. For one week, each group had to analyse and treat at least one out of six patients with fracture or luxation of the upper extremity. The groups had a free choice of tutors among surgeons and physical therapists in the department. The aim was to highlight diagnosis, treatment and rehabilitation and give oral and written reports. The students of both educations were positive to the trial, which gave an improved understanding of their respective occupational roles. They felt that more time was needed for this type of training, but not at the expense of the specific core material of the two educations.

5. Short remarks on experiences of multiprofessional training within the European Region outside Linköping

In Tromsö, Norway, there is a long experience of interprofessional training between undergraduate medical students and nurses specializing in primary health care. The experiences are mainly good according to the author's interviews with the teachers involved.

In Sweden, there are no plans so far to develop multiprofessional training after the Linköping model outside Linköping.

In Kuopio, Finland, there are common introductory lectures for several health fields, but they are not followed by interprofessional training or education in small groups.

In Beersheva, Israel, there is a unique integration of the health and insurance service organization with the university educational and research resources that should facilitate interprofessional training.

6. Some experiences of multiprofessional training in Canada and the United States

In a report (2) from the University of Sherbrooke, Canada, an experiment in multiprofessional education with students in teams comprised of second-year undergraduate students from psychology, nursing and social work was performed. Over a period of 15 weeks, for two days a week they devoted their time to individual work, team meetings and interventions in order to arrange and perform sessions for parents with mentally handicapped children. In this experiment, the students had difficulties in specifying their tasks and planning individual and group work. There were also some difficulties regarding communication between the different professions, since they did not at all employ the same vocabulary. However, despite some fragility of the different professional identities, the teamwork provided an excellent occasion for the students to identify the different professional characteristics but also to question their professions. The team mates also managed to escape from the stereotyped images of their different professions.

The experiment demonstrated the necessity for members of an interdisciplinary team to work at strengthening their professional identity and recognize the professional competence of each of the members of the team. The experiment was also very valuable for the professors involved, who received a lesson in interdisciplinary teaching and confronted their own perceptions of their profession with those of the other professions.

In a study from the University of Kentucky, Lexington, Lynch (3) studied appropriate learning strategies in interdisciplinary education for allied health professions. She stresses the value of cooperative learning strategies to develop collaborative skills, e.g. in communication, trust and conflict resolution. A cooperative goal structure creates a more fertile environment for development of interactive skills, an improved retention and transfer of concepts, rules and principles; an increased ability to understand the perspective of others; more positive attitudes towards the subject matter and peers; better self-confidence and improved skills in leadership. The study focused on the use of group consensus examination in an interdisciplinary course for allied health profession students representing five different allied health disciplines participating in the winter survival exercise course. A large majority of the students preferred group consensus examination to individual testing, feeling that it was more compatible with the philosophy of interdisciplinary (multiprofessional) team training. The following recommendations were proposed.

1. Cooperative learning strategies should be used in interdisciplinary education for health-related professions.

2. Group consensus examinations should be implemented in interdisciplinary courses as one way of creating positive goal interdependence in team problem-solving.

3. Additional studies of the effects on achievement should be performed with additional populations and some assessment made of retention over time.

The third example is a multiprofessional teaching programme in geriatrics (4) from Stanford University, California, where medical students, physicians' assistants, physical therapists and nurse practitioners were given a beginning course in clinical geriatrics by a faculty team, including a physician's assistant, physician nurse, physical therapist, social worker, gerontologist and health educator. The curriculum design was a series of four all-day Saturday class sessions in local community settings serving the elderly. The course objectives were to increase the students' ability to:

- identify the basic physical, psychological and social characteristics of the normal aging process;
- recognize prevalent myths and negative attitudes towards aging that affect health care of the elderly;
- reflect more positive attitudes towards the elderly;
- identify major diseases experienced by older adults and their characteristics, symptoms and effects on patients and their families;
- deal with acute and chronic illness among the elderly and admission to long-term care;
- work with dying patients and their families;
- communicate with healthy and ill elderly people;
- identify community resources available for economic, social, psychological and medical assistance to the elderly;
- recognize the value of the team approach to health care of the elderly.

There were both lectures and active learning in small group activities. Every effort was made to emphasize the interdisciplinary nature of health care delivery. From various disciplines, the faculty modelled their respective roles in patient care through simulated patients, conferences, case presentations and videotaped interactions with patients. The programme stressed the necessity of coordination and cooperation within the health care team. Ten medical students and 34 physician's assistant students, nurse practitioner students and physical therapy students attended the course. The medical students were in their preclinical years, and the other students were in the clinical phase of their programmes.

The students generally responded favourably to the various parts of the course. Of the 23 different topics presented in the four-day programmes, 70% received ratings of 1 or 2 on a 5-point scale (1 being excellent). The conclusion from the authors is that the interdisciplinary education programmes may provide one cost-effective avenue for stimulating student interest, providing clinical education and educating other health care practitioners to the role of the physician's assistant in the health care team.

7. Conclusion

Interprofessional and team training is an innovation requiring broad contact between both the different health fields involved and the health care service. A mutual learning and understanding of the different occupational roles and functions is necessary. Before the students are integrated in a multiprofessional system, their teachers have to be integrated in the strategic and curricular planning. Another lodestar is that the multiprofessional training efforts have to enrich all the participating fields. This requires careful analysis of the objectives, content and methods for multiprofessional education and team training.

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Annex 8

THE BRITISH LIFE ASSURANCE TRUST CENTRE FOR HEALTH AND MEDICAL EDUCATION (BLAT)* AND MULTIPROFESSIONAL TRAINING

by
W.D. Clarke

BLAT's experience of providing multiprofessional training began in 1976 when it offered, in collaboration with WHO, a training course for teachers in the health sciences. Since that time, 111 teachers from 50 different countries have attended the three-week course held in the summer of each year. The course participants included surgeons, physicians, paediatricians, anatomists, microbiologists, biochemists, haematologists, physiologists, radiologists, physiotherapists, statisticians, nurses, health educators, pharmacists, engineers, psychologists, schoolteachers, social workers, administrators and even a journalist.

In 1984, BLAT started another short training course, this time aimed at people whose task is managing collections of audiovisuals or learning resources. Again a three-week summer school, it has also attracted different health professionals from physicians to librarians.

A third experience is a somewhat unique course run in collaboration with the University of London Institute of Education. Lasting either one term for a certificate or one year for a diploma, the course called primary health care education is aimed at any person from the health or teaching professions who intends to work in the developing countries of the world. Since the course was started in 1983, participants from 15 countries have been involved, and among the professions included are those of medicine, nursing, midwifery, school teaching, health education, sanitary engineering, public health, social work, economics, education and anthropology.

Three courses, those of teacher training, managing audiovisuals and primary health care, share a common philosophy in that the selection of participants deliberately aims at ensuring that as many different professions as possible are represented. Apart from the substantial body of educational knowledge with each participant leaves, they also take away the valuable experience of working in a multiprofessional team on a common project and an increased awareness of the work of their fellow professionals. The biological principle of holism applies to multiprofessional teamwork in the sense that the whole is greater than the sum of the parts, provided that the parts can function together. The true professional knows not only where his or her role begins and ends but also the scope of the other professions and where the roles overlap.

When a course starts, it is rare for multiprofessional teamwork to begin spontaneously. In fact, the exact opposite is often true and at the first meeting of participants, as they sit in a circle and the professions are

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* From December 1987 known as the British Life Insurance Trust for Health Education (BLITHE)

revealed, it is possible to detect a sense of amazement, often bordering on hostility, as to why the other people are not from one's own profession. The look on the surgeon's face as he meets the nurse, or the schoolteacher meeting the anatomist, and the physiotherapist meeting the journalist, leaves little doubt as to what thoughts are crossing their minds. Yet only one person in ten years has actually translated his or her thoughts into action and left a course before it has finished!

The glue that in the end succeeds in binding the professions together is of a complex nature. One factor is the informal, nonthreatening and friendly atmosphere deliberately created by teaching staff. Another is the fact that all the professions quickly realize that they have a more or less common ignorance when it comes to the main subject matter of the curriculum, which basically is education. Working as a team member becomes essential when placed in a situation of having to work with a small group of other people to solve a common problem. The blend of nationalities, ages, cultures and languages probably helps, especially if everyone has to work in English as a second or third language. In such a setting, the hidden curriculum quickly takes over and participants rapidly start to learn from each other as well as learning to work together. Perhaps it is not really so surprising because, after all, each person as a highly trained professional working in a conducive environment will find it natural to let his or her intellectual curiosity take over.

Thus, it would seem that the answer to the problem of getting multiprofessionals to work together is to start by training them in a nondirective way, on a common task, and in an area in which they are almost all similarly naive or ignorant. Lecturing to a group of professionals, telling them that they must work together as a group, is rather like expecting someone to learn to swim only by watching the instructor go backwards and forwards in the swimming pool. It is only possible to learn to work or play in a team by being in a team.

Annex 9

MULTIPROFESSIONAL EDUCATION FOR THE HEALTH PROFESSIONS IN THE UNITED KINGDOM

by
W.W. Thomson

The idea that health care would be improved if there was a body of knowledge common to all health professionals has been around for many years. There also seems to be a tacit assumption that shared learning and the study of common core material will achieve better understanding of the work of each professional group by the other and that, somehow, better collaboration will be achieved within teams. There are some who would wish to challenge the assumption that optimal care is provided by the team approach. They would argue that little is yet known about the nature of teamwork and that there is evidence to suggest that some activities that are aimed at teamwork fail to live up to initial expectations.

It must be recognized that, when contemplating the development of collaborative working relationships, there are sometimes interpersonal difficulties and conflicts of interest between professionals that can pose formidable problems. These factors need to be studied and understood before satisfactory educational programmes could be produced, implemented and evaluated.

Despite the emphasis that has been given to the concept of the health care team, little has been done to help health care professionals to work well together with a view to improving health service provision.

As Harden* (1985) says:

> "The concept of the primary health care team is not new although it is still little understood in all its complexities. Health Centre development has been an issue since the implementation of the National Health Service Act and schemes for the attachment of district nurses and health visitors to individual general medical practitioners actively encouraged since the early 1960s. But it was not until the seventies that the term Primary Health Care Team emerged, and it appeared for the first time in the DHSS Annual Report in 1974."

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* Harden, R.W. Professor of Medical Education, University of Dundee, Scotland. Material cited from the literature review of a research proposal submitted for funding 1985/1986.

Harden (1985) cites a few publications that give examples of interdisciplinary programmes for continuing education (6-10).

Despite a paucity of research aimed at investigating the nature of teamwork and a lack of national strategy for multiprofessional education and team building, a great many small-scale projects and local initiatives do exist in the United Kingdom. A brief description of a few examples of a variety of activities in which co-professionals work, study and learn from each other follows. It is not an exhaustive survey and is produced merely for illustrative purposes.

Almost every report on community health care in the United Kingdom has suggested that the most likely solutions for problems with teamwork lie with the education of future team members during their initial courses in medicine and nursing and their subsequent training as general practitioners, district nurses and health visitors (1-4). Strong support for an educational approach has also been given by the former Council for the Education and Training of Health Visitors (CETHV), the former Panel of Assessors for District Nurse Training (PADNT), the Royal College of General Practitioners (RCGP) and the Central Council for the Education and Training of social Workers (CCETSW).

It should be noted, however, that Argyris & Schon (5) developed a very powerful argument against trying to change the practice of a profession through its students. Newly qualified practitioners emerging from courses, filled with knowledge and enthusiasm derived from one set of theories and assumptions, would have great difficulty in translating such theories into action if this mode of operation was rejected by the qualified practitioners already established in the field. The major task therefore seems to be the need to change, or attempt to change, the knowledge and attitudes of current practitioners, so that when newly qualified district nurses, general practitioners and health visitors emerge from their courses, they enter a responsive team-oriented environment and not a hostile independent-minded hierarchy.

1. Shared learning and core curriculum

Although the idea of core curriculum and common pathways in professional education is a comparatively recent phenomenon, it is not novel in Scottish education. Traditionally, students who eventually enter different professions study together for the first two of their undergraduate years. Students aiming for an honours degree and those who wish to read for a liberal arts or unclassified degree select subjects at first and second level from the same range of courses. It is only at the third year that they separate into the general or the honours degree group.

More recently, other educational institutes have been experimenting with groups of students who aim for different professions and who study topics of mutual concern or interest. Examples of such areas of work include ethics, health education, communication skills, counselling and many others. The professions involved are usually community nurses, social workers, health visitors, occupational therapists and occupational health nurses; the staff include teachers from those professions, plus others with backgrounds in health education, medicine, divinity or philosophy.

Developments in nurse education and recent nursing legislation in the United Kingdom are also fostering the idea of common core curriculum for different groups of nurses studying for separate professional qualifications. One example is a common core of studies for student district nurses and health visitors. For the future, it is hoped that students of occupational health and school nurses might also participate in the common core. A second example is the development of a course in mental health for qualified nurses. The curriculum is modular so that it can be taken as a full course leading to qualification as a community psychiatric nurse, or nurses from the mental illness and mental handicap fields may elect to do one or two modules from the course as part of their programme of continuing education.

An important educational development is taking place in care of the mentally handicapped. It has long been recognized that institutional approaches and the medical model of care are inappropriate for this group of individuals. Normalization, independence training, socialization and community involvement are all emphasized, and it is suggested that professionals who assist the mentally handicapped to achieve a good quality of life in the community must share elements of their education in order to become fully competent to deliver services for the mentally handicapped. The professional groups involved in this development are nurses, social workers, teachers and health educators.

2. Practice-based activities

There are many examples in the United Kingdom of groups of co-professionals who are actively seeking to achieve health goals by collaborative effort, e.g. the setting up of peripheral maternity clinics for antenatal surveillance of pregnant women in Scotland. These operate from clinics and health centres in a local community, and hospital consultant obstetricians and midwives work with the general practitioners and community nursing staff to provide antenatal care to the pregnant women of that area. This type of service is acceptable to the client group, as seen by improved attendance at clinics. While it is not possible to attribute cause and effect relationships, it is interesting to note a reduction in the perinatal mortality rate in these areas.

There are many other examples of practice-based activity by multiprofessional groups focusing on particular client groups, such as women who breastfeed, the elderly, children at risk, people with alcohol and drug-related problems, school health services, cardiac rehabilitation and education for health.

3. Research projects and proposals for research

Multidisciplinary teams of health professionals engaged in research are now fairly common in the United Kingdom. Published reports and articles in professional journals, although not abundant, have grown in number over recent years. In the past, the nurse's involvement in such multiprofessional teams was often limited to data collection, but now it is much more likely that the nurse will be involved in the research design and proposal for funding and may, indeed, be the member of the team with a specific background in social science research methodology.

These research projects or proposals for research cluster around three main areas of enquiry as follows.

- What constitutes an effective team? How may the effectiveness of teams be measured?
- How do co-professionals collaborate? How might the skills needed for collaboration be improved?
- How do members of different professional groups perceive and assess the health deficits of particular client groups?

Work related to the first type of enquiry is being undertaken at the University of Newcastle-Upon-Tyne by Bond et al. These workers are trying to develop research tools that can be used to assess the effectiveness of team behaviour. This is a DHSS-funded project and a report, Professional collaboration in primary health care organisations, was published early in 1986. A summary of the findings and recommendations from this study is attached as Appendix B.

On the second type of study, Harden et al. (11) have recently received support funding from SHHD for a project entitled "The development and improvement of the primary care team". This research proposal emerged from the Joint Working Group of the National Board for Nursing Midwifery and Health Visiting for Scotland and the Scottish Council for Postgraduate Medical Education. The Joint Working Group was established in September 1983 "to consider the need for inter-professional continuing education for the professions involved in primary care". The study will aim at developing and evaluating a "pilot programme for continuing education to examine the way in which a health care team functions in the promotion of patient care and how it can best be helped, through an educational programme, to identify its most appropriate approach to health care".

An example of the third type of approach can be seen in the work of a general practitioner and a health visitor (12). A report, Health assessment of the elderly at home, has been prpduced for Help the Aged, a voluntary organization in the United Kingdom. It has not yet been published, but articles are soon expected in professional journals. The study had two main objectives:

- *to describe the scope and content of health assessment of older people at home as perceived by different professional groups and by older people themselves;*
- *to describe the views and feelings of different professional groups towards visiting and assessing the health of older people at home.*

The study method involved the development of a package of questions related to a series of video recordings of older people at home that were then used to assess the views of students and experienced practitioners from seven different health professions. In addition, a general practitioner, a district nurse and a health visitor in two primary health care teams were each interviewed about individual patients whom all three knew and visited. Predictably, the following were found:

- *separate records;*
- *overlap of information held by all three;*
- *some gaps in information;*
- *lack of discussion and pooling of information;*
- *some inaccuracies and misperceptions;*
- *worries/anxieties held in isolation by particular professionals about the same patient.*

The researchers suggested that their findings have implications for the development of multiprofessional approaches to the education of co-workers in health care (see Appendix C).

4. Additional information

Appendix A lists some examples of the many short courses and workshops that aim at attracting a multiprofessional group of participants.

Appendix B summarizes the main findings and recommendations from the Newcastle study.

Appendix C summarizes the main findings and recommendations from the Buckley and Runciman study.

Appendix D shows a selection of publications on and around the subject of multiprofessional education, team building and primary health care.

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Appendix A

SHORT COURSES, SEMINARS, WORKSHOPS AND OTHER ACTIVITIES

There are innumerable short courses which aim to attract a multi-professional group of participants. These are commonly of one to five days' duration and are usually focused on particular themes/topics of concern or interest to a variety of health professionals.

To give an idea of the range of this type of activity, some of the titles of such courses offered in Edinburgh are listed here.

Spinal cord injury
Challenges in the management of disability
Cardiac rehabilitation
Working with ethnic minorities
Brain damaged adults
Communication disorders
Stroke
Young chronic sick
Social, employment and re-settlement problems
Psychological problems and family support
Head injury
Hand disorders
Violence in the family
Enabling independence in old age
Normalisation and community services for mentally handicapped people
Death, dying and bereavement

Exhibitions

Incontinence
Footwear
Wheelchairs
Patient lifting aids

Appendix B

SUMMARY OF STUDY CONDUCTED AT THE UNIVERSITY OF NEWCASTLE-UPON-TYNE

UNIVERSITY OF NEWCASTLE UPON TYNE
HEALTH CARE RESEARCH UNIT

REPORT NO. 27

A study of interprofessional collaboration in primary health care organisations

Volume 1 - Summary

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LIST OF CONTENTS

page number

LIST OF TABLES AND FIGURES vi

ACKNOWLEDGEMENTS vii

PREFACE viii

VOLUME 1 - SUMMARY

Introduction 1
The development of joint working in primary health care organisations. A review of theory and research 1
Study design 1
Characteristics of respondents 3
Characteristics of the district health authorities and practice environments 4
Professional activities and work arrangements 4
Prospective record of workload, referrals and and interprofessional interactions 5
Interprofessional activities and interactions 5
Attitudes of respondents 6
Respondents' views on teamwork 7
Summary of respondents' data 8
Agreement and reciprocity in potential collaborative units 8
The extent of collaboration in primary health care organisations 8
Indices of interprofessional collaboration 9
Recommendations for policy and further research 10

VOLUME 2 - FULL REPORT

LIST OF TABLES AND FIGURES vi

ACKNOWLEDGEMENTS xiv

PREFACE xv

ABBREVIATIONS xvi

CHAPTER 1. The development of joint working in primary health care organisations. A review of theory and research

Introduction 1
Historical developments 1
Theoretical perspectives 5
Studies of joint working 16
Measuring interprofessional collaboration 20

CHAPTER 2. Study design

Objectives 21
Research design 21
Target population 22
Sampling frames and sampling procedure 23
Methods 25
Organisation of data collection 27
Response rates 28
Summary 30

CHAPTER 3. Characteristics of respondents

Introduction 31
Demographic characteristics 31
Qualifications and training 32
Professional career 34
Summary 41

CHAPTER 4. Characteristics of the district health authorities and practice environments

Introduction 42
Profile of districts 43
Practice environment 46
Summary 55

CHAPTER 5. Professional activities and work arrangements of respondents

Introduction 56
Work arrangements 56
Meetings 61
Summary 66

CHAPTER 6. Prospective record of workload, referrals and interprofessional interactions

Introduction 67
Patient encounters 68
Patterns of referrals 69
Patterns of interactions 73
Summary 76

CHAPTER 7. Interprofessional activities and interactions

Introduction 78
Joint working 78
Consultation and referral 83
Records 87
Role appreciation 88
Introduction to potential-collaborative-unit partner 89
Rating of collaboration 90
Summary 93

CHAPTER 8. Attitudes of respondents

Introduction 95
Method 95
Results 96
Relationship with rating of collaboration 102
Summary 103

CHAPTER 9. Respondents' views on teamwork

Introduction 104
Teamwork 104
Leadership 107
Summary 111

CHAPTER 10. Summary of respondents' data

Introduction 113
Respondents 113
Work patterns 114
Interaction 114
Joint working 115
Proximity 117
Records 118
Consultations and referrals 119
Collaboration 121
Attitudes and opinions 124
Study objectives 126

CHAPTER 11. Agreement and reciprocity in potential collaborative units

Introduction 127
Doctor-nurse PCU 127
Doctor-health visitor PCU 133
Summary 139

CHAPTER 12. The extent of collaboration in primary health care organisations

Introduction 140
Rating of the potential collaborative units 140
Relationship between rating and other variables 141
Summary 147

CHAPTER 13. Indices of interprofessional collaboration

Introduction 149
Statistical method 149
Indices of collaboration based on objective variables 152
Indices of collaboration based on interview variables 153
Summary 156

CHAPTER 14. Recommendations for policy and further research

Implications for policy 158
Secondary analysis 159
Recommendations for future research 161

REFERENCES 163

GLOSSARY 170

APPENDIX A. The area health authority and family practitioner committee surveys.

Introduction 178
Objective 178
Method 178
Results 179
Sampling frame for implemental stage 182

VOLUME 3 - RESEARCH INSTRUMENTS

PREFACE vi

APPENDIX B Interview questionnaire

APPENDIX C Practice questionnaire

APPENDIX D Prospective record

APPENDIX E Semantic differential

APPENDIX F Area health authority and family practitioner committee questionnaire

APPENDIX G Selected letters sent to respondents as part of the sampling procedure

LIST OF TABLES AND FIGURES

Table S.1 A taxonomy of collaboration

Table S.2 Five-point rating scale

Figure S.1a Histogram of collaboration in 148 doctor-nurse potential collaborative units on five-point scale

Figure S.1b Histogram of collaboration in 161 doctor-health visitor potential collaborative units on five-point scale

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Our grateful thanks to colleagues who worked on the project team in the past but who have moved on to other projects or who are no longer in the Health Care Research Unit. Also to Joyce Crawley, who was involved in the initial data processing, Doris Fadden who stepped in and assisted in the fieldwork, and Lorna Wake who helped with interviewing arrangements.

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Finally, we would applaud the respondents who participated in the survey. Not only did they allow themselves to be involved in a fairly long interview but they took part in other tasks so providing us with important and interesting data. Without their co-operation we could not have succeeded in producing this report.

PREFACE

This study was made possible by the interest of customers at the Department of Health and Social Security and funding through the nursing research liaison group of the Office of the Chief Scientist. The study arose out of the previous work, interest and insight of Dr. Barry Reedy who was its project leader until the end of 1984. Unfortunately, due to ill health Barry was forced to take early retirement; therefore the final analysis and production of this report has been the responsibility of those listed on the title page. Barry's enthusiasm as well as his previous experience as a general practitioner were greatly missed by the project team during this period.

While this research was in progress the Joint Working Group of the standing medical advisory committee and the standing nursing and midwifery advisory committee on the primary health care team chaired by Wilfrid G. Harding was sitting. The research team provided oral and written evidence to this Working Party through Barry Reedy. It is hoped that this report will help answer many of the questions left unanswered at that time. In the weeks preceding the presentation of this report we were able to provide the Community Nursing Review Working party chaired by Mrs. Julia Cumberlege with advance copies of chapters. We hope that these data were directly useful to them and will also be of further use to other customers and members of the three health professions studied. In the long term we hope that this report will benefit the consumers of primary health care services: the patients of primary health care organisations.

SUMMARY OF REPORT

INTRODUCTION

This report describes a survey of the three most numerous health professionals working in primary health care organisations: district nurses (DNs), general practitioners (GPs) and health visitors (HVs). The aims of the study were:

1. To measure the existence and extent of collaboration among the three most numerous professionals in primary health care organisations in England.
2. To develop indices of collaboration.

THE DEVELOPMENT OF JOINT WORKING IN PRIMARY HEALTH CARE ORGANISATIONS. A REVIEW OF THEORY AND RESEARCH (Chapter 1).

Since the inception of the National Health Service (NHS) it has become generally accepted that the future development and efficient operation of the NHS would increasingly depend on co-operation between the various health professionals and occupational groups working within health care organisations. This acceptance is reflected in the importance placed on 'teamwork' in primary health care organisations by the Royal Commission on the National Health Service (1979) and the Joint Working Group of the Standard Nursing and Midwifery Advisory Committee (DHSS, 1981).

Chapter 1 reviews three areas. It provides a historical account of the development of primary health care organisations and the professional groups working in them; an overview of the theoretical perspective adopted in this study; and a selective review of empirical studies which have been concerned with joint working.

The chapter shows that administrative changes made to primary health care organisations over the last forty years have not led inevitably to patterns of joint working and an improvement to the service to patients, and that although attachment and the promotion of health centres may be necessary conditions for interprofessional collaboration they are not in themselves sufficient. Our concern therefore in this study is an investigation into the extent of joint working in primary health care organisations throughout England.

STUDY DESIGN (Chapter 2 and Appendix A)

Chapter 2 describes notable features of this study: in particular the unique sampling scheme as well as a number of data collection instruments developed especially for the project. The sampling procedure represented an advance on previous work in primary health care in that it allowed the random selection of pairs of professionals who shared the care of at least some patients.

Since collaboration is an attribute of groups rather than individuals, our target population was one of pairs of professionals sharing the care of some patients. Having patients in common does not predict the extent of any working relationship between the pair which was therefore known as a potential collaborative unit (PCU). Two types of PCUs were studied: district nurse and general practitioner PCUs (doctor-nurse PCUs) and general practitioner and health visitor PCUs (doctor-health visitor PCUs). To arrive at a sample of PCUs in twenty district health authorities (DHAs) a three-step procedure was established.

In step 1, we sampled twenty DHAs which had been stratified by the attachment rates of DNs and HVs, by the proportion of GPs working in a health centre, and by whether the district was predominantly urban or predominantly rural. The sampled districts were found to be representative of all districts in England.

In step 2, in order to avoid the bias inherent in a sampling frame based on general practices a technique was used which derived random samples from each of the three professional groups to be studied. The aim was to obtain three DN-initiated PCUs, six GP-initiated PCUs with DNs, six GP-initiated PCUs with HVs and three HV-initiated PCUs. Two random samples were drawn within each district. A list of community nurses was obtained from the District Nursing Officer and stratified by profession, the number of hours worked and whether the community nurse was attached or not. From this list three DNs and three HVs were randomly sampled. A list of GPs was obtained from the appropriate FPC and stratified by practice size and wether the practice was in a health centre or not. From this list six GPs were randomly sampled. These stratifications ensured that our sample contained the same proportion in each category as existed in the district as a whole.

These twelve 'first members' were invited to participate in the study and asked to complete a short questionnaire in which GPs estimated what proportions of nursing and health visiting time devoted to their patients had been contributed by different DNs and HVs: district-nurse and health-visitor respondents estimated the proportion of their own time they had spent with the patients of different GPs.

In step 3, a 'second member' for each PCU was randomly sampled from the lists provided by the 'first members' with probability proportional to the estimated proportion of time provided by each community nurse to each GP. Since each GP initiated two PCUs - one with a DN, the other with a HV - 18 PCUs were sampled from each DHA. Thirty interviews were needed in each DHA, 12 with GPs, nine with DNs and nine with HVs.

This sampling procedure ensured that our description of collaboration would be biased neither towards high collaboration (which would have occurred if first members were allowed to select their PCU partner) nor towards low collaboration (which would have resulted if an unweighted sample of second members was drawn). Thus the final sample of PCUs reliably represents the position throughout England.

The study was divided into three consecutive stages of research: preliminary, developmental and implemental. The preliminary stage focused on developing five research instruments which were fully piloted in the developmental stage before their use in the implemental stage.

Interview questionnaire. The interview questionnaire was the major device for data collection and was administered personally by one of the project team. The information gathered included detailed demographic material, the existence of collaborative activities with other professionals and, in particular, with the other member of the PCU. The interview questionnaire examined the organisation of the respondent's work, background, working environment and working relationship with the other member of the PCU. Finally the interviewer rated the closeness of the respondent's working relationship with their PCU partner on a five-point scale of collaboration devised by the project team.

Prospective record. To underpin these interviews, a prospective method of data collection was devised which did not rely on respondents' recall and thus provided more objective data. This prospective record measured a process central to collaboration between professionals, that of the referrals of patients from one to another. Each respondent was asked to keep the prospective record for a week to record the age and sex of each patient seen, and whether referred to them or by them. The record also requested information about each referral, including the profession of the individual making or receiving the referral. Respondents were also asked to note the purpose and nature of all communications with other professionals.

Semantic differential questionnaire. A short attitude measure designed to investigate respondent's attitudes towards other professionals working in primary health care was left with the respondent at the end of the interview.

Practice questionnaire. Since all respondents work to some extent within the framework of a health centre or general practice, this questionnaire was devised to describe this aspect of their working environment. The practice questionnaire was left with general-practitioner respondents during the fieldwork to be completed by them or their delegate.

District Health Authority interview. District nurses and health visitors are also obliged to work within the framework of a health authority whose policies and other characteristics may affect the way in which professionals work together in the community. Since the relevant information is varied and complex, a semi-structured interview was administered to a nurse manager at the level of Director of Nursing Services in each DHA.

CHARACTERISTICS OF RESPONDENTS (Chapter 3)

The data reported in this chapter were collected from the interviews with the three types of health professionals. Data relating to gender, age, qualifications and training suggest that our respondents are representative of DNs, GPs and HVs working throughout England.

We describe the reasons given by our respondents for taking a community' job. A majority of GPs and HVs gave answers which we have categorised under the heading of 'community orientation'. A large proportion of DNs gave a similar response, but a similar proportion of DNs gave answers which we have categorised under the heading 'family commitments'. This could reflect the higher incidence of marriage among district-nurse respondents compared to health-visitor respondents.

We also discuss the problems we had in describing and categorising the numerous 'jobs' which make up our respondents' careers. However, by summarising these data we are able to show the wide breadth of experience enjoyed by many of the respondents.

CHARACTERISTICS OF THE DISTRICT HEALTH AUTHORITIES AND PRACTICE ENVIRONMENTS (Chapter 4)

This chapter provides a profile of each sampled district showing some of the working arrangements for DNs and HVs. We found great variation between the districts, for example, their different patterns of attachment and geographical working. We found a wide variation between districts in the proportion of DNs and HVs who were attached to general practices as well as in the type of premises from which community nurses worked. (In this summary community nurses refers to district nurses and health visitors.) Each district also had its own policy in relation to the number and type of procedures in which community nurses were involved. These variations in the type of allowed procedures were the result of supply and demand in one or two instances.

Data collected by the practice questionnaire showed variations in the preponderance of small practices, wide variations in the provision of services as well as in the number and type of practice employed staff. We found that the majority of practices operated an appointment system and just under half used deputising services. Two fifths of the responding practices were training practices. More than half of the practices had an age-sex register and the overwhelming majority of practices continued to use the standard medical envelope for patients' records. We found that antenatal or postnatal services were the most frequently provided within the practices and over half the practices also provided immunisation, well woman and child health services. The types of professionals attending these services were also recorded.

PROFESSIONAL ACTIVITIES AND WORK ARRANGEMENTS (Chapter 5)

Data for this chapter were collected by the interview questionnaire. Working arrangements for the three groups of respondents did differ. We found that even though the range of hours worked each week was different for GPs and community nurses, the median hours worked were quite similar. The median hours GPs spent on surgery consultations was eighteen hours per week and the median number of patients seen in one hour was ten. We found that, not unexpectedly, DNs made more home visits than GPs and HVs and that DNs were less involved in clinic sessions than the other two groups.

Meetings are an important aspect of joint working. We found that most respondents attended intraprofessional meetings but substantially less attended interprofessional meetings. Health visitors attended a higher proportion of interprofessional meetings and tended to have them with a wider range of other professionals than the district-nurse and general-practitioner respondents.

PROSPECTIVE RECORD OF WORKLOAD, REFERRALS AND INTERPROFESSIONAL INTERACTIONS (Chapter 6)

Data reported in this chapter were collected by the prospective record, the purpose of which was to provide an account of what respondents did within a working week in terms of the type of patients they saw, referrals made and received as well as the type of contact they had with other professionals. As expected we found that DNs saw mainly elderly patients, GPs encountered patients in all age groups, while HVs saw mostly younger patient groups.

District nurses made and received the largest proportion of referrals from GPs. In contrast, HVs received the highest number of referrals from diverse nursing sources such as other HVs, DNs, midwives and school nurses, although of the referrals they made, the highest number were to GPs. General practitioners both made and received referrals to and from other doctors, but made substantially more referrals than they received.

We found that DNs received more referrals by telephone than by any other means. However, when making referrals themselves they indicated a preference for making them face to face. Again, whilst they also received a substantial number of referrals in writing, they rarely used this method themselves when making referrals. In contrast, HVs made and received referrals more often in a face to face encounter than by telephone. As with DNs, they received more written referrals than they made.

When making referrals DNs tended to pass on about the same level of information that they received when patients were referred to them; GPs passed on a greater depth of detail than they generally received in referrals; and HVs passed on less information than they received.

District-nurse and health-visitor respondents had more planned but informal meetings than GPs, who on the other hand, had relatively more unplanned and informal meetings than either DNs or HVs. Planned and formal meetings did not appear to play a large part in respondents' daily work activities.

Respondents had more meetings with members of their own professional group than with any other. Each professional group had more meetings in rooms or offices specifically relating to them - in consulting rooms, DN or HV offices.

INTERPROFESSIONAL ACTIVITIES AND INTERACTIONS (Chapter 7)

Data for this chapter were collected by the interviews with the three groups of professionals. The chapter focuses on respondents' relationships with their PCU partner and with other members of their

Table 5.1 A taxonomy of collaboration

Stages of collaboration	Definitions
1. Isolation	Members who never meet, talk or write to one another
2. Encounter	Members who encounter or correspond with others but do not interact meaningfully
3. Communication	Members whose encounters or correspondence include the transference of information
4. Collaboration between two agents	Members who act on that information sympathetically; participate in patterns of joint working; subscribe to the same general objectives as others on a one-to-one basis in the same organisation
5. Collaboration throughout an organisation	Organisations in which the work of all members is fully integrated

Table 5.2 Five-point rating scale

1. You and X work independently with no communication between you, except perhaps through a third party.
2. Communication between yourself and X is limited to brief, formal contacts containing a minimum of information.
3. Communication between yourself and X occurs on a fairly regular basis with appropriate consultation and referral of patients.
4. There is constant contact between yourself and X concerning patients held in common, resulting in a high level of joint working.
5. There is a high level of joint working, not only between yourself and X but including all other workers in the primary health care setting as appropriate.

partners' profession. Half the community nurses worked with the patients of six or more GPs. In districts where full attachment operated, community nurses usually worked with just one practice.

General practitioners did not always know basic facts about the community nurses with whom they worked, i.e. whether the community nurses were attached to the practice or not and how long they had worked with them. Half of the respondents reported that they had worked with their PCU partner for less than three years but had worked longer with other members of their PCU partner's profession.

Between one third and four fifths of respondents said that their PCU partner's base was in the same building as their own. However, the majority of respondents indicated that they spent less than five hours per week in the same building at the same time as their PCU partner.

We found that overall the majority were consulted by or consulted their PCU partner. Health visitors consulted their general-practitioner partner more often than they were consulted by him. The majority of respondents also referred patients to and received referrals from their PCU partner and also provided feedback about any referrals they received. The majority of respondents also felt that referrals they received were appropriate to their skills.

A majority of community-nurse respondents reported consulting general-practitioner records and had free access. We found that the majority of GPs consulted district-nurse records which were those usually left in patients' homes but only a minority consulted health-visitor records. These records were usually kept in HV offices. It was not a common practice for respondents to make entries in the records of other types of professionals.

In this chapter we describe a taxonomy of collaboration. (See Table S.1). This formed the basis of a five-point rating scale which was used to rate the relationship between the pairs of professionals in doctor-nurse PCUs and doctor-health visitor PCUs. The rating scale was completed by both the interviewer and the respondents at the end of each interview. (See Table S.2). The assessment made by the interviewer was as objective as possible being based on the actual data collected as well as the unrecorded comments made by respondents. Interviewers used the higher rating less often than respondents. However, there was greater compatibility between the HV and interviewer ratings than between the other professional types and interviewer ratings.

ATTITUDES OF RESPONDENTS (Chapter 8)

Chapter 8 describes the semantic differential technique which was the method used to investigate the attitudes of our types of professionals towards each other. The technique required respondents to rate a concept, in our case a profession, on a series of bi-polar scales. The scales were chosen from previous attitude research and from work carried out during the preliminary stage of the project when district nurses, general practitioners and health visitors provided undirected statements indicating the way in which they viewed the other professions.

Data reported in this chapter were collected by the self-completed attitude questionnaire left with respondents after interview. As measured by the semantic differential technique each profession viewed the three professions significantly differently on each scale. We found that respondents saw themselves in a more favourable light than they saw other members of their profession. Also they tended to view their own profession more positively than they did the other professions.

The concept of attachment was received in a generally favourable way by the majority of respondents, although the community-nurse respondents tended to view attachment as compulsory and the general-practitioner respondents tended to view it as voluntary.

In Chapter 7 we had described the method by which the interviewers rated the working relationship with the PCU partner on a five-point scale and in Chapter 8 we examined the correlation between this and the different scales for each concept. It was found, with the exception of views on attachment, that there was no significant relationship between the interviewers' rating of collaboration of potential collaborative units and the scales of each of the semantic differential concepts. These data suggest that the respondents' attitudes towards other health professionals may not affect or be affected by their working relationships with particular members of other health professions.

RESPONDENTS' VIEWS ON TEAMWORK (Chapter 9)

Data for this chapter were collected by the interview questionnaire.

There was considerable concensus among respondents as to the need for collaboration and good communication networks. Few respondents had difficulty in identifying areas which they considered to be important for 'teamwork' to establish itself.

We found that overall the majority of respondents accepted the concept of leadership, but the majority of all respondents were against the idea that leadership should be the responsibility of one individual or one profession.

Respondents provided us with data showing first if they felt they were members of a primary health care team, and second which professions made up that team. Most respondents made it clear that they saw DNs, GPs and HVs as forming the 'core' of a team with readily available input from other disciplines, the latter depending upon the particular problem or area of discussion. We also have data describing respondents' 'ideal team', i.e. given carte blanche, which professions would be represented in this ideal team. We found that a high proportion of all respondents expressed an interest in having a social worker as a member. Also, interest expressed in the midwife was greater in the ideal situation than in the existing one, suggesting that a midwife is less in evidence than respondents would like.

Apart from the professions mentioned, the composition of teams highlighted the different aspects of primary health in which our three professional types were involved, emphasising their different training and professional orientation.

SUMMARY OF RESPONDENTS' DATA (Chapter 10)

This chapter provides a fuller summary of the data collected from respondents and reported in the previous chapters. The data are used to illustrate the relationship between the characteristics of respondents, their working arrangements, their patterns of working and their attitudes, and a rating scale based on a taxonomy of collaboration.

AGREEMENT AND RECIPROCITY IN POTENTIAL COLLABORATIVE UNITS (Chapter 11)

Chapter 11 is concerned with those variables which involve both potential-collaborative-unit (PCU) partners and uses data only from those PCUs where both partners were interviewed.

Two types of analyses were performed for this chapter. One was a form of reliability testing based on pairs of questions which provided data showing the proportion of PCUs where both partners were in agreement.

We found that on the whole the two members of the doctor-nurse PCUs and doctor-health visitor PCUs gave sufficiently consistent answers to the pertinent questions for us to be confident as to their reliability. However, though the level of reliability was high, there were important odd cases where agreement was consistently poor. These cases tended to be those where, for various reasons, the relationship was inadequate.

The second type of analysis was based on questions which were concerned with a simple form of reciprocity, for example, we enquired of each partner if they asked the other's advice.

There was a high level of reciprocity occurring in the areas of consultation and referral, for example, in 94% of the doctor-nurse PCUs both respondents reported that they received referrals from their PCU partner. We found, however, a very low level of reciprocity in doctor-health visitor PCUs in relation to the use of partners' records. Similarly we found a low level of reciprocity with the mutual use of first names in both types of PCUs whilst quite a few GPs used the community nurse's first name, only a small number of these community nurses called the GP by his first name, resulting in less than a fifth of all partners being on a mutual first name basis.

THE EXTENT OF COLLABORATION IN PRIMARY HEALTH CARE ORGANISATIONS (Chapter 12)

As one of the aims of this research was to produce a measure of collaboration an objective judgement of the relationship between the PCU partners, based on the five-point scale (described in Chapter 7) was made by the interviewer. On completion of interviews in a particular health authority, interviewers met to discuss the ratings made for each member of a PCU then made a judgement as to the rating to be given to the PCU itself.

Figure 5.1a Histogram of collaboration in 148 doctor-nurse potential collaborative units on five-point scale

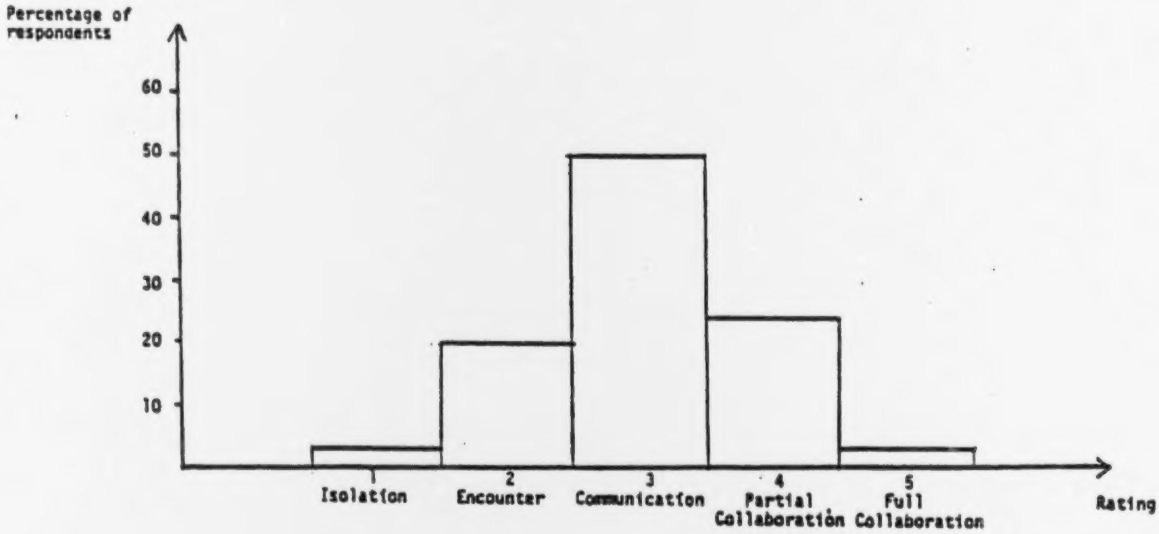
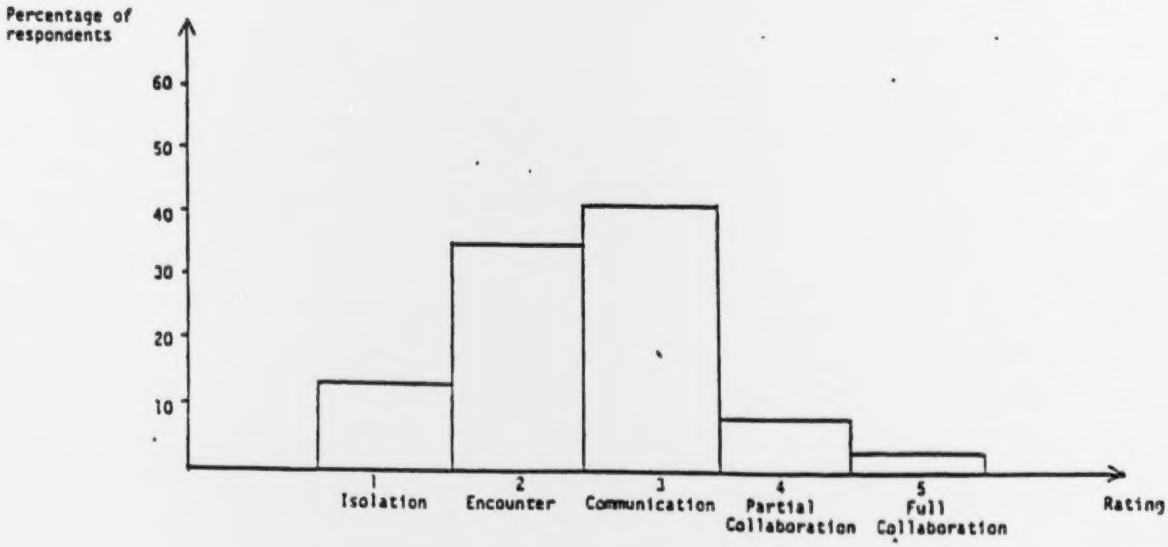


Figure 5.1b Histogram of collaboration in 161 doctor-health visitor potential collaborative units on five-point scale



Using this judgement, we have in this chapter been able to show the extent of existing collaboration between particular pairs of professionals working in primary health care. (See Figure S.1).

There was a somewhat higher level of collaboration between DNs and GPs than between HVs and GPs. We found that for both types of PCUs the highest proportion of PCUs was contained in rating three which is midpoint on the scale. Rating three is concerned with those respondents who communicate on a fairly regular basis with their PCU partner and exchange information which is meaningful to both. But we also know from other data that frequency of communication for most in this group is not high, between one and five times per month. Those in rating four, however, have developed their communication into a more discursive style. Not only has the relationship a more qualitative aspect, respondents tended to communicate more often. Doctor-nurse PCUs are more in evidence in this more collaborative rating than doctor-health visitor PCUs, the latter being more in evidence in the lower ratings.

In order to understand these differences, we looked more closely at particular variables and their effect on the rating of the relationship between the two types of PCUs. In both types the following variables produced significantly high ratings: attachment of community nurse to GP partner's practice, the lower the number of GPs with whom community nurses worked, being based in the same building as PCU partner, the longer partners were in the same building at the same time, interprofessional meetings where both partners were present, high frequency of consultations and referrals, shared decision making following consultation, meeting by chance, working in a DHA stratified as rural, and commenting on each other's work. In addition, in the doctor-health visitor PCU, higher collaborative ratings were also associated with the fewer the number of practices with which the HV worked, the longer the GP worked with the HV, mutual consultations or referrals, receiving appropriate referrals from a GP partner, where a GP understood a HV's role, clinics where both partners were present, mutual consulting of records, where HV wrote in GP's records, where the HV saw the relationship as friendly and informal and where there was mutual use of first names.

INDICES OF INTERPROFESSIONAL COLLABORATION (Chapter 13)

One of the aims of the study was to develop indices of the degree of collaboration between a DN and a GP and between a HV and a GP. Chapter 12 considered how individual variables were related to the interviewers' rating of collaboration but many of these variables were highly correlated. The aim of Chapter 13 is to summarise the various influences on collaboration in the form of mathematical equations which predict the level of collaboration between each pair of professionals. To do this a logistic discriminant analysis which selects some variables and allocates to all selected variables weightings which together predict the degree of collaboration between members of PCUs was performed.

The chapter describes the production of indices of collaboration based on objective variables collected by the interview questionnaire from both members of a PCU and by the practice questionnaire for both doctor-nurse PCUs and doctor-health visitor PCUs. It also describes the production of indices of collaboration based on objective and subjective variables collected by the interview questionnaire from both members of a PCU or from just one member.

The indices produced in this chapter are based on ten variables or less. However the individual variables included in the indices in no way explain the mechanisms behind collaboration or suggest how it might be improved. They can only be used as a package to measure collaboration. Once they have been tested on another population their uses vary from informing management decisions to providing a rigorous instrument for future research into collaboration either to investigate the effects which policies, resources and other characteristics of primary health care organisation and district health authorities have on collaboration or to relate collaboration to the achievements of these organisations.

RECOMMENDATIONS FOR POLICY AND FURTHER RESEARCH (Chapter 14)

Policy recommendations

Based on the findings of this study we suggest the following policy recommendations:

1. The organisation of patient records in primary health care organisations should be reviewed and their joint use by primary health care professionals should be promoted.

2. Positive attitudes towards attachment and the development of group practice based in health centres should be encouraged.

3. Develop and evaluate methods of promoting joint working.

4. Encourage stable attachment, balancing individual needs for experience with the promotion of positive relationships.

5. Encourage collaboration among GPs regarding zoning of practices to alleviate some of the costs of attachment of nurses to general practices. Where geographical working for community nurses exists, this will reduce the number of GPs whom community nurses are obliged to work with.

6. Develop joint educational sessions for training GPs, community nurses and social workers. Encourage refresher courses for GPs and community nurses. Promote the idea of interprofessional education.

Recommendations for future research

1. Studies should be undertaken which examine the effectiveness of interprofessional collaboration on the clinical, social and economic outcomes of patient care.

2. Studies should be undertaken to assess the degree of collaboration among other pairs of primary health care professionals: district nurse and health visitor, district nurse and practice nurse, general practitioner and midwife, general practitioner and social worker, health visitor and midwife, health visitor and social worker.

3. Studies should be undertaken of the system of referrals between district nurses, general practitioners, health visitors, GPs, HVs, midwives and social workers, since this is a central aspect of collaboration.

4. Studies should be undertaken using ethnographic methods to describe in detail the characteristics of collaborating pairs of primary health care professionals.

5. Studies should be undertaken to review the allocation of community nurses to practices within DHAs.

6. Studies should be undertaken to review the methods used by nurse managers to promote interprofessional collaboration.

7. Studies should be undertaken to review collaboration between FPCs and DHAs since professionals who deliver primary health care to the community will be affected albeit indirectly by the level of collaboration between these two bodies.

8. Studies should be undertaken to further develop and test indices of collaboration between various pairs of primary health care professionals.

9. Studies should be undertaken to describe the work of liaison nurses within DHAs.

Questions About Team Working

1 Are we all here for a common purpose?

2 What is that purpose?

3 Do we agree about the tasks we set ourselves?

4 Do we define them adequately?

5 Can they be measured so that we know if task has been completed?

6 Are we clear about our own role in the team?

7 Are we clear about the roles of others in the team?

8 Are these roles in conflict? If so where?

9 Are we unable to fulfil our role (e.g. due to overwork)?

10 Is our ability to carry out our role hampered by outside pressures or conflicts? (For example, not being allowed to make decisions, being afraid of litigation, etc.)

11 In making decisions do we take adequate notice of
   a) who has the relevant information?
   b) who has to carry out the decision?

12 Are decisions usually made
   a) unanimously? b) by majority?
   c) by team leader? d) by default?

13 When conflict arises do we
   a) ignore it? b) allow one person to force a decision?
   c) compromise? d) look for alternative solutions?

14 Do we let everyone have a chance to speak or do we let one or two members do all the talking?

15 Does everyone feel free to challenge any statements made in the group?

16 Do we let members keep repeating their own point of view and raising irrelevant issues?

17 Do team members concentrate on the task or waste time trying to impress?

18 Are team members sensitive to how others in the group feel about discussion?

19 When a decision is made is it carried out, or is it forgotten?

20 Do we waste time or allot it according to the priority of the task?

21 Does the team follow-up its decisions, question the outcome and learn by its mistakes and successes?

22 Does the team meet often enough and in the right circumstances and is the size of group right?

23 Can any member suggest any way in which team working could be improved?

24 Can the team tolerate failure and give mutual support rather than blame?

25 Is the team morale high? If not, why not?

A list of this kind will provoke discussion within the team and may point to areas where team working could be made more effective.

P Pritchard
Manual of Primary Health Care
2nd Edition (1981) Oxford University Press.

Appendix C

SUMMARY OF STUDY CONDUCTED BY BUCKLEY AND RUNCIMAN

HEALTH ASSESSMENT OF THE ELDERLY AT HOME

E Graham Buckley and Phyllis J Runciman
University of Edinburgh - 1985

This study of the health assessment of older people at home was undertaken by a health visitor and a general practitioner over a two year period. It was supported by Help the Aged.

STUDY OBJECTIVES

The study had two main objectives:

1. To describe the scope and content of health assessment of older people at home as perceived by different professional groups and by older people themselves.
2. To describe the views and feelings of different professional groups towards visiting and assessing the health of older people at home.

These objectives were set by the researchers in the light of their experience in practice.

The researchers were concerned about:

- the major challenge facing the health professions in Scotland in attempting to assist older people and their relatives in the community;
- the continuing reservoir of undetected and unmet health needs of older people, and
- the problems associated with organising systematic detection of health needs and disabilities of older people.

STUDY METHODS

1. Video studies - A package of questions, related to a series of three short video-recordings of elderly people, was developed. The short 'trigger' video-recordings acted as a standard stimulus for all study participants.

   Excerpt 1 and its questions related to the scope and content of assessment.

   Excerpt 2 and its questions related to a specific and common problem for older people - medicine taking.

   Excerpt 3 related to the attitudes of health professionals towards working with older people. A semantic differential was used as a measure of attitudes with this video excerpt.

2. Questionnaires - The questionnaire provided information about:
   - personal and professional experience in dealing with older people, and
   - the views and feelings of the study participants about visiting older people at home.

STUDY PARTICIPANTS

There were twelve groups: total sample - 318

Health Visitor students	43
Experienced Health Visitors	
- with fieldwork teaching responsibilities	33
- without fieldwork teaching responsibilities	20
District Nurse students	24
Experienced District Nurses	19
General Practitioner trainees	50
Experienced General Practitioners	26
Physiotherapy students	20
Occupational Therapy students	9
Social Work students	9
Home Care (home help) Organisers	34
Elderly people attending Day Centres	31

PROMPT LIST

The final part of the study involved the development and testing, in a small number of primary health care teams, of a prompt list, or aide-memoire for assessment (Appendix 1).

The prompt list summarised the key areas of assessment and was based upon the video responses of all study participants. It was used to analyse the knowle held by the general practitioner, the health visitor and the district nurse about individual elderly people who were known to all three professionals.

CONCLUSIONS

The researchers consider that the search for pre-symptomatic disease in older people is not required. The real need is for the detection of existing sympt and disabilities in older people so as to improve and maintain a high quality of life for as long as possible. If this concept of case finding is acceptab as an appropriate one for older people, then the questions of how it is done and who will do it can be tackled in a logical way.

Case finding requires the assessor to be sensitive and skilful in listening t the description of symptoms and to have expertise in assessing the ability of an older person to carry out essential and desirable activities of daily living

Each individual elderly person presents a set of problems and priorities which will be identified more readily if assessment is carried out in a flexible and relaxed manner. In our pilot study, attempts to conduct assessments along a set path were easily thwarted by the elderly person.

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CONCLUSIONS (continued)

1. Scope and content of assessment

- The scope is wide. There were 46 major categories of assessment and many areas to assess within certain categories.
- There were worrying gaps in the following areas of assessment: feet, continence, toileting, hearing, security and telephone, attitudes and feelings of carers, medication, memory and orientation, bereavement and sleep, teeth and dentures.
- The range of content of assessment appeared to be similar for older people and health professionals.
- There were common elements in the framework of assessment from the different professional groups. This has implications for the way in which the groups should work together and for the way in which they should be educated.
- All groups had difficulty outlining the content of assessment of medicine taking. No clear framework of assessment emerged and there were major gaps affecting all groups in this aspect of assessment.

2. Views and feelings about visiting and assessing older people at home

- Feelings ranging from enjoyment to anger and despair were expressed.
- The health visitor group showed the widest range of response from the enthusiastically positive to the frankly hostile.
- Five themes emerged. Feelings were related to:

  (i) Priorities - There was conflict between perceived needs and demands of different care groups, for example, between the young and the old. There was also conflict between the demands of primary, secondary and tertiary prevention.

  (ii) Preferences - There were preferences for work with particular age and care groups, influenced by personal and professional factors.

  (iii) Skills and training - Some participants felt ill-prepared for assessment of older people. There had been a lack of specific guidance during training for this aspect of work.

  (iv) Work organisation and team relationships - There was considerable overlap in function between the professional groups and difficulty in identifying the most appropriate contribution for each group. Difficulties in communication and in establishing good working relationships were also identified. The perception of the role of another professional was narrower than the perception of one's own role.

  (v) Resources and services - Lack of resources and services was a major frustration.

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CONCLUSIONS (continued)

3. The Prompt List

The investigation of the knowledge held by team members about individual elderly people indicated the following: overlap in the considerable amount of information held by general practitioner, district nurse and health visitor; small gaps in overall knowledge; some differences in perception of problems; separate records; the same worries and anxieties being held in isolation by particular professionals about the same patient.

The prompt list was found to be relevant and useful to the members of the primary care teams. By emphasising the common nature of health assessment it had potential for enabling team members to pool their knowledge and to communicate more effectively with each other about an individual's health needs.

RECOMMENDATIONS

Educational recommendations

(i) The first essential is for the need for specific training about health assessment in older people to be acknowledged by the responsible institutions.

(ii) There is a need for education to be based on reality. Theoretical models and concepts about ageing may be of interest but are no substitute for developing practical skills in interviewing older people and helping them with their practical problems.

(iii) All professional groups wish to be involved in the health assessment of older people. It is vital therefore that educational activities should whenever possible be multi-disciplinary.

(iv) At basic level, students require to learn about health as well as disease. Most basic courses are hospital or college based and more of the early educational experience needs to be in the community.

(v) In vocational or post-basic training the need for shared educational experiences between the different professional groups is possibly even greater, so that good working relationships and patterns can become established and effective communication can develop.

(vi) In continuing education the need is for educational activities to become part of the normal functioning of the team. At present each profession tends to organise its programme of continuing education to be away from the work place.

Managerial recommendations

(i) The health care problems of the elderly can appear to be so large that they paralyse action. One profession by itself is unable to cope, and co-ordinated efforts are required. Much can be achieved by the creation of a policy guideline by health authorities.

(ii) The appropriate managerial role is for support and stimulation of primary care teams. All health professional groups are being expected to be more accountable for the services they provide. Increased accountability will serve no purpose if it makes health visitors, district nurses and general practitioners defensive and negative. Managers can help to define health problems and provide information and resources. Primary care teams should establish the appropriate priorities in their work and produce their own solutions to local problems.

(iii) The revolution in information technology should be employed constructively to prevent duplication of work and free staff from unnecessary data collection and clerical work so as to increase the time available for clinical work.

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Appendix 1

MOBILITY
- Outside
  - Using public transport
  - Shopping
- Inside
- Steps/Stairs
- Balance
  - Gait
  - Falls
- Joints
  - Stiffness
  - Range of movement
- Transferring
  - Chair
  - Bed
  - Toilet

EXERCISE
- On exertion
  - Breathless
  - Chest pain
  - Leg pain

LOWER LIMBS
- Feet
  - Nails
  - Chiropody
  - Circulation
- Ankle swelling
- Stasis ulcer

SKIN
- Itch
- Pressure areas

VISION
- Reading
- Glasses

HEARING
- Doorbell
- Normal conversation
- Aid

SELF CARE
- Personal hygiene
  - Washing
  - Bathing
  - Toileting
- Dressing

CONTINENCE
- Bladder
  - Stress
  - Frequency
  - Urgency
  - Day/Night
- Bowel
  - Constipation
  - Change

AIDS
- Walking
  - Stick
  - Tripod
  - Frame
- Toileting
  - Commode
  - High seat
- Bathroom
- Kitchen

HOUSE & HOUSEHOLD TASKS
- Garden
- Layout
  - Rooms
  - Furniture
- Heating
- Hazards
  - Fires
  - Rugs
  - Wiring/plugs
- Security — Door
- Laundry
- Cleaning
- Cooking & preparing food

NUTRITION
- Diet
  - Appetite
  - Type of meals
  - Food in larder/fridge
- Weight change
- State of teeth/dentures

FINANCE
- Benefits and pensions

LEISURE & INTERESTS
- TV/Radio
- Reading
- Pets
- Outings
- Smoking and alcohol

MENTAL STATUS
- Memory
- Orientation
- Mood
  - Anxiety
  - Depression
- Loneliness
- Grief/Bereavement
- Sleep pattern

ATTITUDES
- To
  - present health
  - housing
  - acceptance of help

SOCIAL SUPPORT
- Relatives
- Neighbours
- Friends
  - Frequency of visits
  - Attitudes of supporters
  - Signs of stress in supporters

COMMUNICATION
- Help in emergency
- Telephone

SERVICES
- Health services
  - HV
  - DN
  - GP
  - Hospital
- Social Work Dept.
  - MoW
  - HH
  - OT
- Voluntary organisations

MEDICATIONS
- Drugs taken
  - Prescribed
  - Non-prescribed
- Reason for taking
- Side effects
- Compliance
- Renewal of prescriptions

MEDICAL HISTORY

Prompt list for health assessment of the elderly
From: BUCKLEY E. G. and RUNCIMAN P. J. 1985 Health Assessment of the Elderly at Home University of Edinburgh.

Appendix D

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Annex 10

COMBINATION OF MONO-AND MULTIDISCIPLINARY COURSES IN DYNAMIC POSTGRADUATE TRAINING SYSTEM OF PHYSICIANS IN THE USSR

by
E.N. Shigan

Problems of postgraduate training of physicians are being solved differently in countries with different health systems, forms of physician incentive, levels of their professional knowledge and skills, and other features.

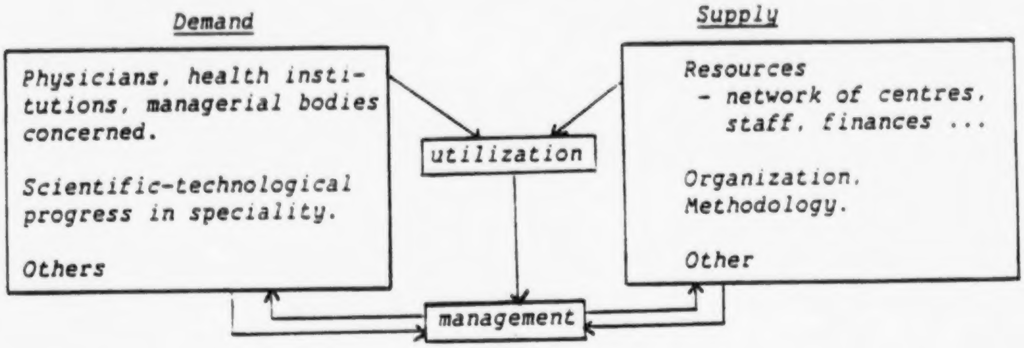
In the USSR, the improvement of professional knowledge and skills of physicians is a State task, the realization of which is legislatively guaranteed. According to this a system of physician postgraduate training has been organized and is now successfully functioning to ensure periodical (every 5 years) physicians' training in special teaching centres - institutes and faculties for postgraduate training. Each centre is responsible for a cohort of physicians working in a concrete region of the country. Administrators of health institutions, specialized services, city and regional health managerial bodies are concerned with improving the professional level of their personnel, control and ensure the regularity of training. Salaries and posts are reserved for those physicians who are sent to the teachings centres. Statistical indices which can be derived from health institutions, city and regional services reports enable the evaluation of different aspects of the system.

Physicians themselves also take an interest in improving their knowledge and skills training in teaching centres considerably influences their professional activities.

The activities of the postgraduate training system of physicians in the USSR are directed and controlled by a special department of the USSR Ministry of Public Health. The Central Institute for Advanced Medical Studies (CIAMS) is a main scientific and methodological centre of the system, and is a WHO Collaborating Centre. Annually, more than 18 000 physicians are taught in about 100 departments. In the Institute there are special methodological units which, in collaboration with those departments, define needs in postgraduate training, elaborate professional-functionary requirements (the tree of training objectives) and teaching programmes, select optimum alternatives of teaching technology, and assess the effectiveness of training.

The USSR system of physician postgraduate training is provided with due resources, orders of standards, instructions, methodological recommendations for main aspects of activities of all elements of the system, relevant register records which enables effective management of multi-facette activity of the institutions pertaining to the system. Thus, this system is a typical control one with its objectives, organizational, methodological, resource, and information support (Fig. 1).

Figure 1. Block-diagram of physician postgraduate system


Demand
Supply
Physicians, health institutions, managerial bodies concerned.
Scientific-technological progress in speciality.
Others
utilization
Resources
- network of centres, staff, finances ...
Organization, Methodology.
Other
management

In the USSR, during his professional life each physician improves his knowledge and skills several times through training courses in different teaching centres. This, together with the physician's individual work and activities of health institutions aimed at improving the professional level, provides a basis for creating a system of continuous improvement of knowledge and skills of its health personnel .

At present all courses for physician postgraduate training fall into two types as follows.

1. *Monodisciplinary professional-functionary, job-oriented.*

2. *Multidisciplinary problem-oriented.*

Monodisciplinary courses relate to the preparation of the physician for carrying out his professional duties in accordance with contemporary requirements and functionary obligations, with regard to a concrete post, e.g., courses for surgeons working in policlinics, head physicians of local hospitals, etc.

The technology of organizing and conducting such courses is relatively simple:

- *studying of peculiarities of professional-functionary physicians, activities, and setting of the priorities to them;*
- *constructing of the tree of training objectives;*
- *elaboration of the teaching programme;*
- *selection of optimum forms and methods of teaching;*
- *forming of a homogeneous professional-functionary group of participants;*
- *appraisal of input knowledge and skills of the participants;*
- *dividing of the participants into subgroups according to the input control results;*
- *correction of the teaching programme in accordance with individual and subgroup knowledge;*
- *teaching with intermediate control of knowledge and skills;*
- *assessment of output knowledge and skills;*
- *evaluation of effectiveness of the courses.*

Depending on the objectives, professional-functionary courses may be divided into basic and subject advanced courses. At basic courses the participants become aware of basic knowledge related to all aspects of their professional-functionary activities. Subjects ones focus on a concrete professional-functionary activity.

Recently multidisciplinary courses have been gaining in popularity. At these courses the process of solving a problem of concern is simulated through a special teaching technology. Unlike the monodiscipline courses the group of participants here is heterogeneous. The heterogeneity depends upon peculiarities of the problem under study.

Multidisciplinary courses may be divided into multiprofessional, multifunctionary, and multiservice ones.

Multiprofessional courses are characterized by different professions of the participants. For example, the group of participants may comprise physicians, sociologists, economists, psychologists, and other specialists. This group may also consist of representatives of the medical profession, but differ in specialty, e.g., ambulance physicians and those from reception units in their effort to simulate the solution of emergency care problems, or pediatricians and obstetricians solving problems of perinatology, and so forth.

Multifunctionary courses aim at teaching the participants the process of solving a problem related to various hierarchical levels of a single profession. In practice there are a variety of problems which arise from disturbances in vertical interaction between central and regional institutions. Depending upon the problem, a group of participants may include representatives of the first health system level, rayon and oblast levels, and the USSR and Soviet Republic Ministry of PH officers.

Multiservice courses deal with problems associated with the interests of several services. The participants of such courses come from territorial preventive-curative institutions, industrial enterprises and transport health services, etc.

Both types of courses may be discrete (when some part of a teaching programme is realized by participants at their places of work) and continuous (when participants return to their institutions after finishing their study).

The effectiveness of multidisciplinary problem-oriented courses will depend to a great extent upon the degree of studying of a problem, correctness of its decomposition into subproblems and decisions, and selection of relevant participants.

Therefore, a preparatory period of these courses is time consuming. This period may be divided into stages as follows.

- *Studying of the problem;*
- *Its decomposition;*
- *Building of the tree of objectives (decision of the problem);*
- *Construction of a block-diagram of the system for solving the problem;*
- *Definition of study objectives;*
- *Elaboration of the teaching programme;*

- Selection of participants (according to the diagram of the system);
- Selection of the optimum teaching technology;
- Preparation of supporting materials;
- Solution of organizational issues (selection of teachers, lecture-rooms equipment and so forth).

Depending upon specificity of a problem under study, different variants of teaching technology are possible.

The technology of group dynamics coupled with wide use of business games and expert procedures (especially the Delphi method) is gaining in popularity. This technology provides a good basis for a concrete simulation of problem solutions, the participants playing not their parts but simulating their professional activities, e.g., the head physician of a health institution simulates head physicians' activities, statistician acts as a statistician and so forth. In the process of teaching the participants, on the basis of the programme approach, successively "solve" a health problem employing group dynamics, supporting materials and relevant equipment.

Recently, at CIAMS, a teaching technology defined as discrete dynamics has been elaborated and tested. An accurate decomposition of a problem into subproblems and establishing of a list of individual, contiguous, and complex subproblems with subsequent simulation of its solving during teaching period are the basis of the technology.

Individual subproblems are of interest for a group of participants of one profession, e.g., for territorial physicians (general practitioners, uchastok physicians and so forth).

Contiguous subproblems relate to two specialties, e.g., problems of interaction between territorial and industrial health services.

Complex subproblems are dealt with by all groups of participants. The teaching period of this technology is divided into three stages: the stage of individual seminars at which small homogeneous groups tackle individual subproblems, the stage of complex seminars which focus on complex subproblems common for all participants.

Thus, if the preparatory stage is characterized by the decomposition of a problem (from the general to the particular), teaching involves the contrary process, i.e., from solving of individual subproblems to simulation of solving contiguous and common subproblems.

In a number of cases, taking into account different knowledge and skills of participants in the field of systems analysis, programme approach, expert procedures, modeling and computing machinary, the stage of group or discrete dynamics is preceded by the stage of so-called "school" at which different levels of knowledge and skills are equalized. This enables an increase in effectiveness of group or discrete dynamics.

Evaluation of the effectiveness of knowledge and skills obtained is performed on the basis of comparison of input and output control results, objective and subjective indices with regard to each participant, section of the programme and group as a whole being estimated. Different kinds of technical means for evaluation of teaching effectiveness have been elaborated and are widely used, varying from simple devices to sophisticated automated dialogue systems.

Much attention is attached to elaboration of forms and methods of assessing a remote effectiveness, i.e., implementation of the results obtained into practice. In this connection, physician's performance before training courses and some time after returning to his place of work is estimated.

At present within the system of postgraduate training the experiment of organizing and conducting the two-year continuous teaching of managers of industrial enterprise health services is underway. This programme includes professional-functionary courses and several short-term problem-oriented ones in teaching centres. The participants study mainly at their localities using concrete data on health institutions performance, their professional-functionary activities being uninterrupted. Only for two and a half months within this period they are taught in teaching centres (professional-functionary courses for one month and four short-term problem-oriented ones for 10 days each). According to pecularities of an analysing problem, short-time courses can be carried out like professional-functionary ones with homogeneous groups or like multidisciplinary ones with participation of representatives of different professional and functionary levels. Preliminary results indicate high effectiveness of such a continuous teaching through professional-functionary and multidisciplinary courses, sessions at teaching centres, and studying by correspondence.

Nowadays, many interesting experiments are being conducted in order to value the effectiveness of different forms and methods of teaching, to analyse immediate, remote and accumulated effects, and the impact of various teaching technologies on the performance of physicians, health institutions, city and regional health services. Expected results will be used to further improve the activities of the physician postgraduate training system.

Annex 11

TEAMWORK AND MULTIPROFESSIONAL TRAINING PROGRAMMES IN HEALTH SECTOR IN YUGOSLAVIA

by
L. Kovacic

1. Introduction

The WHO Collaborating Centre for Primary Health Care of the Andrija Stampar School of Public Health formed a working group that produced this report.

After having consulted collaborators from other republics, it was agreed that a typical example would be to analyse experiences and particular cases in the territory of the Socialist Republic of Croatia.

In Yugoslavia, there is a tradition of teamwork and multisectoral approach to solving health problems. For instance, in the 1930s, several campaigns were carried out for the comprehensive development of villages (Mraclin, Ivanjica) in which different sectors jointly participated: besides the health service, agriculture and education played an important role. Preventive health work and sanitation were carried out by hygiene institutes at regional level. Their activity was coordinated by the Central Hygienic Institute together with the School of Public Health in Zagreb. Institutes of hygiene have multidisciplinary teams (physicians, nurses, sanitary engineers and technicians, chemists, agronomists, veterinarians, etc.) who carry out field campaigns. In the School of Public Health in Zagreb, these experts train health workers, mostly nurses and laymen, who become key persons in local communities and the activating force in health educational work and the health campaign. This teaching activity exists not only in Zagreb but also in Belgrade and Sarajevo.

Such operational activities were undertaken during inservice training in the form of short courses, field studies and actions. However, this was not feasible altogether in formal undergraduate education.

2. Analysis of multiprofessional training through the curricula of school for health workers

Today, different profiles of experts participate in basic education (training) of health workers. Besides narrow health professions, the following also participate: psychologists, pedagogues, sociologists, economists, lawyers, biochemists and others. For illustration, two examples are given here of a teaching curriculum for two profiles of a health worker, a public health nurse and a physician.

The public health nurse is, as a rule, a nurse with two years training from the College of Nursing after having eight years obligatory of primary school and four years of secondary school. According to the curriculum, 37.4% of teaching hours are held by experts other than health workers in the narrow sense (physicians, nurses, pharmacists). Of this, 13.2% are general educational subjects such as a foreign language, physical education and national defence (which are the same for all schools, not only the Medical School). However, 24% are vocational subjects given by other than health workers in the narrow sense (Table 1).

Table 1. Curriculum hours of the College of Nursing, by types of subject

Types of subject	Number of hours	%
General subjects[a]	240	13.2
Vocational subjects by teachers of nonmedical disciplines	437	24.2
Vocational subjects by teachers of medical disciplines	1128	62.5
TOTAL	1805	99.9

[a] 120 hours of physical training are not included in the total number of 1805 hours.

The education of physicians lasts five years (in practice about six years) after eight years of primary school and four years of secondary school. In undergraduate medical education, about 745 teaching hours of vocational subjects out of 4500 hours are held by experts of nonmedical professions in the narrower sense. This amounts to 16.6% of the total number of hours (Table 2).

Table 2. Curriculum hours of Zagreb Medical School by types of subject

Types of subject	Number of hours	%
General subjects*	240	5.3
Vocational subjects by teachers of nonmedical disciplines	745	16.6
Vocational subjects by teachers of medical disciplines	3515	78.1
TOTAL	4500	100.0

* Time for physical training, hospital practice and diploma paper is not included in the total of 4500 hours.

The Medical School teaching staff participate in the training of other health workers besides physicians (stomatologists, nurses) and other experts (social workers, special teachers).

3. Postgraduate education

Postgraduate training is multiprofessional to a different degree. Some of the courses are predominantly professional (clinical professions), while others are clearly interdisciplinary and multiprofessional. For instance, the postgraduate course in gerontology has about 50% of teaching content with non health-related topics. Courses in public health and epidemiology, informatics, school hygiene and health-related ecology also include other professions.

Previous education of candidates, who enrol into various health science schools, the Medical School and postgraduate courses, is different. Medical school candidates come from the College of Nursing as well as from other schools. This has been happening especially during the last few years when more and more nurses and health technicians, after having passed the entrance examination, enrol into the Medical School. Although the influence of different background education of candidates has not yet been evaluated, the impression of teachers of social medicine (one year) is that it makes it easier for these students to understand the role of other professions.

Some postgraduate courses can be attended, by other experts who participate in health care, besides physicians. As an example, several postgraduate courses and composition of participants at the Andrija Stampar School of Public Health are shown in Table 3.

on some preventive work. As leaders, all assistants from basic, clinical and preventive chairs were included. Work was organized by the School of Public Health and health centres in the field. This practice had several dimensions:

- basic and clinical science staff were involved in solving primary health care problems;
- this practice enabled links and collaboration between public health and clinical medicine.

Voluntary forms of interdisciplinary work. In the students' club of public health (student nonteaching voluntary activity) in Zagreb, there is a long tradition of interdisciplinary work in field campaigns in solving certain problems. Field teams, usually composed of medical students, nursing students, psychology students, dental students and others, spend their free time (Saturdays, Sundays, vacation time), working in particularly remote areas on health education, constructing sanitary facilities and other health measures. The same activity is going on with the organization of students' peer help groups dealing with psychosocial problems. They joined the team for different reasons, such as an opportunity for professional experience, charitable work, friendship. Such teams usually work together for one to two school years. Members of teams have understood the position and professional role of other members, and friendship and collaboration usually remain after qualification.

5. Assessments and conclusions

Despite examples and practical experience in multiprofessional training and positive attitude (in principle) towards such training and work, it is not adequately presented in regular forms of teaching.

Teaching plans for education of health workers include contents of other disciplines that have to be mastered by health workers. In the same way, teachers from the College of Nursing participate in the training of other professionals.

Based on practical experience, it has been noted that greater success is obtained in multidisciplinary education if it is linked to concrete field work with people participating in this form of education on a voluntary basis. If education is obligatory, difficulties arise and the results are less successful.

In the health service today, specialization and subspecialization are becoming more and more popular and are causing growing divergency in attitudes, interests and knowledge of health workers in different disciplines, the consequence of which is lack of understanding and difficulties in implementing joint actions and joint solving of health problems of individuals and groups. Because of this, there is a growing need for multidisciplinary education of health workers of different health disciplines.

For better understanding, it would be necessary to define the terms "interdisciplinary", "multidisciplinary" and "transdisciplinary" education training.

Table 3. Postgraduate courses in 1985/1986

Participants	Public health	Gerontology	Health informatics
Physicians	4	10	13
Economists	1		3
Lawyers	2		1
Stomatologists	1		
Social workers		10	
Special teachers		2	
Sociologists		1	
Others	2		5

4. Examples of multiprofessional training

Experiment of linking different disciplines within the formal teaching process. During two academic years, within the subject of social medicine conducted at the Andrija Stampar School of Public Health, seminar groups included both medical students (V - final year) and students of social work (IV - final year). Teachers' observations were positive, but some difficulties in work occurred:

- different professional foreknowledge of both groups of students: if examples were not carefully selected for one group of students, the contents were too simple while for the other group they were incomprehensible;
- a relatively long period of "warming up" due to pronounced initial frustration;
- elements of competition between the two groups and solidarity within the group;
- signs of feeling superior or inferior by members of two different disciplines which manifested itself in poor participation, insecurity, etc., and even aggression;
- rational analysis of the situation was not always successful.

Education during practical work. In field epidemiological studies and other field campaigns (epidemiological studies of, for instance, psychosis, diabetes and similar in the Socialist Republic of Croatia from 1964 to 1974), surveys and other activities were conducted by medical students, nurses and students of psychology, which proved to be very useful in the field work itself as well as in the long-term collaboration between the two professions. A type of interdisciplinary training for medical students was also field summer practice, guided by all young faculty members. This field practice was obligatory. Fourth-year medical students, in groups with nurses of five or six and guided by one assistant, spent one month working in different places

6. *Suggestions and actions*

For the need to improve multiprofessional training of health workers in primary health care and the health service as a whole, two activities are under way.

In 1985, the College of Nursing was integrated with the Medical School. Some chairs of the Medical School took over the training of nurses and health technicians, and the teaching staff are also involved in joint scientific and research work. In the same way, it is expected that teachers from the College of Nursing will participate and change teaching for medical students. The goal is to avoid the possible undesirable impact of this integration on teaching, knowledge and attitudes, especially of nurses. On the other hand, the multidisciplinary teaching has an organizational chance. Because of that, careful planning and preparation of teachers and students are necessary. One part would be carried out by organizing joint teaching for medical students and nurses in which the acquisition of knowledge and formation of attitudes in both groups of students would be observed.

A special need for multiprofessional training is felt in preventive and public health postgraduate courses. Besides physicians, other professionals participate in health care in this field, e.g. economists, lawyers, social workers, biologists, physicists, mathematicians, sociologists, psychologists. The home training institutions of these professions often do not have any special interest in applying their disciplines in medicine, so there are difficulties in engaging them in education in the health field. Home training institutions have good collaboration with the Medical School, which results in interdisciplinary postgraduate courses (gerontology, informatics), but professionals hesitate to participate in teaching in many other fields that they consider of minor importance. There are also problems regarding the procedure for obtaining either a Master's or a Doctor's degree; participants of nonmedical professions attending health postgraduate courses have to prove their theses at their own college (law, economy or other) although their topic is applied in the field of health. The goal is to follow-up the situation at the University of Zagreb, to collect experiences from other universities and to initiate optimal solutions.